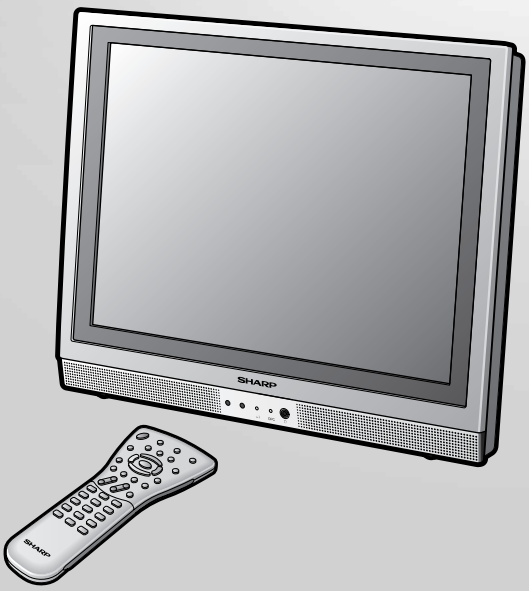
SHARP

LC-20S1E

LCD COLOUR TELEVISION
LCD-FARBFERNSEHGERÄT
TÉLÉVISION COULEUR À ÉCRAN À CRISTAUX LIQUIDES (LCD)
TELEVISORE A COLORI LCD
TELEVISIÓN EN COLOR LCD
LCD-FÄRG-TV
LCD-KLEURENTELEVISIE

AQUOS



OPERATION MANUAL
BEDIENUNGSANLEITUNG
MODE D'EMPLOI
MANUALE DI ISTRUZIONI
MANUAL DE MANEJO
BRUKSANVISNING
GEBRUIKSAANWIJZING

ENGLISH
DEUTSCH
FRANÇAIS
ITALIANO
ESPAÑOL
SVENSKA
NEDERLANDS

This equipment complies with the requirements of Directive 89/336/EEC and 73/23/EEC as amended by 93/68/EEC.

Dieses Gerät entspricht den Anforderungen der EG-Richtlinien 89/336/EWG und 73/23/EWG mit Änderung 93/68/EWG.

Ce matériel répond aux exigences contenues dans les directives 89/336/CEE et 73/23/CEE modifiées par la directive 93/68/CEE.

Dit apparaat voldoet aan de eisen van de richtlijnen 89/336/EEG en 73/23/EEG, gewijzigd door 93/68/EEG.

Dette udstyr overholder kravene i direktiv nr. 89/336/EEC og 73/23/EEC med tillæg nr. 93/68/EEC.

Quest'apparecchio è conforme ai requisiti delle direttive 89/336/EEC e 73/23/EEC come emendata dalla direttiva 93/68/EEC.

Η εγκατάσταση αυτή ανταποκρίνεται στις απαιτήσεις των οδηγιών της Ευρωπαϊκής Ενωσης 89/336/ΕΟΚ και 73/23/ΕΟΚ, όπως οι κανονισμοί αυτοί συμπληρώθηκαν από την οδηγία 93/68/ΕΟΚ.

Este equipamento obedece às exigências das directivas 89/336/CEE e 73/23/CEE, na sua versão corrigida pela directiva 93/68/CEE.

Este aparato satisface las exigencias de las Directivas 89/336/CEE y 73/23/CEE, modificadas por medio de la 93/68/CEE.

Denna utrustning uppfyller kraven enligt riktlinjerna 89/336/EEC och 73/23/EEC så som kompletteras av 93/68/EEC.

Dette produktet oppfyller betingelsene i direktivene 89/336/EEC og 73/23/EEC i endringen 93/68/EEC.

Tämä laite täyttää direktiivien 89/336/EEC ja 73/23/EEC vaatimukset, joita on muutettu direktiivillä 93/68/EEC.

SPECIAL NOTE FOR USERS IN THE U.K.

The mains lead of this product is fitted with a non-rewireable (moulded) plug incorporating a 3A fuse. Should the fuse need to be replaced, a BSI or ASTA approved BS 1362 fuse marked ♆ or ◈ and of the same rating as above, which is also indicated on the pin face of the plug, must be used.

Always refit the fuse cover after replacing the fuse. Never use the plug without the fuse cover fitted.

In the unlikely event of the socket outlet in your home not being compatible with the plug supplied, cut off the mains plug and fit an appropriate type.

DANGER: The fuse from the cut-off plug should be removed and the cut-off plug destroyed immediately and disposed of in a safe manner.

Under no circumstances should the cut-off plug be inserted elsewhere into a 13A socket outlet, as a serious electric shock may occur.

To fit an appropriate plug to the mains lead, follow the instructions below:

IMPORTANT: The wires in the mains lead are coloured in accordance with the following code:

Blue : Neutral Brown : Live

As the colours of the wires in the mains lead of this product may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows;

- The wire which is coloured blue must be connected to the plug terminal which is marked N or coloured black.
- The wire which is coloured brown must be connected to the plug terminal which is marked L or coloured red.

Ensure that neither the brown nor the blue wire is connected to the earth terminal in your three-pin plug.

Before replacing the plug cover make sure that:

- If the new fitted plug contains a fuse, its value is the same as that removed from the cut-off plug.
- The cord grip is clamped over the sheath of the mains lead, and not simply over the lead wires.

IF YOU HAVE ANY DOUBT, CONSULT A QUALIFIED ELECTRICIAN.

ENGLISH

LC-20S1E

LCD COLOUR TELEVISION

ENGLISH

OPERATION MANUAL

Contents

Page

Dear SHARP Customer **2**
Important Safety Precautions **2**
Supplied Accessories **4**
Preparation **5**
- Installing Batteries in the Remote Control 5
- Using Remote Control 5
- Power Connection 6
- Antenna Connection 6
- Listening with Headphones 6
- First Installation 7

Part Names of Main Unit **8**
Part Names of Remote Control **10**
Basic Operation **11**
- Turning On and Off the Main Power 11
- ON/OFF Standby 11
- Switching the TV/VIDEO (AV1/AV2/TV) Mode 11
- Sound Volume 12
- Changing Channels 12
- Selecting Menu Items 13

Page

Useful Features **15**
- Adjusting Picture Settings 15
- Adjusting Sound Settings 15
- Hi-fi Sound Settings 16
- Using Programme Table 16
- Programmes 17
- Features 21
- On-screen Display 23
- Child Lock 23
- AV Connections 27
- Timer Functions 29
- NICAM Broadcast Selection 30
- A2 stereo Broadcasts 31

Teletext **32**
Connecting External Devices **35**
- Examples of external devices that can be connected 35
- 21-pin Euro-SCART (RGB) 36
- How to fix the cables 37

Troubleshooting **38**
Specifications **39**
Dimensional Drawings **40**

Dear SHARP Customer

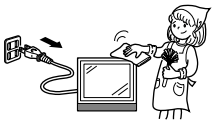
Thank you for your purchase of the SHARP LCD Colour TV product. To ensure safety and many years of trouble-free operation of your product, please read the Important Safety Precautions carefully before using this product.

Important Safety Precautions

Electricity is used to perform many useful functions, but it can also cause personal injuries and property damage if improperly handled. This product has been engineered and manufactured with the highest priority on safety. However, improper use can result in electric shock and/or fire. In order to prevent potential danger, please observe the following instructions when installing, operating and cleaning the product. To ensure your safety and prolong the service life of your LCD colour TV product, please read the following precautions carefully before using the product.

- Read instructions—All operating instructions must be read and understood before the product is operated.
- Keep this manual in a safe place—These safety and operating instructions must be kept in a safe place for future reference.
- Observe warnings—All warnings on the product and in the instructions must be observed closely.
- Follow instructions—All operating instructions must be followed.
- Attachments—Do not use attachments not recommended by the manufacturer. Use of inadequate attachments can result in accidents.
- Power source—This product must operate on a power source specified on the specification label. If you are not sure of the type of power supply used in your home, consult your dealer or local power company. For units designed to operate on batteries or another power source, refer to the operating instructions.
- Power cord protection—The power cords must be routed properly to prevent people from stepping on them or objects from resting on them. Check the cords at the plugs and product.
- Overloading—Do not overload AC outlets or extension cords.
  Overloading can cause fire or electric shock.
- Entering of objects and liquids—Never insert an object into the product through vents or openings. High voltage flows in the product, and inserting an object can cause electric shock and/or short internal parts. For the same reason, do not spill water or liquid on the product.
- Servicing—Do not attempt to service the product yourself. Removing covers can expose you to high voltage and other dangerous conditions. Request a qualified service person to perform servicing.
- Repair—If any of the following conditions occurs, unplug the power cord from the AC outlet, and request a qualified service person to perform repairs:
  a. When the power cord or plug is damaged.
  b. When a liquid was spilled on the product or when objects have fallen into the product.
  c. When the product has been exposed to rain or water.
  d. When the product does not operate properly as described in the operating instructions.
  Do not touch the controls other than those described in the operating instructions. Improper adjustment of controls not described in the instructions can cause damage, which often requires extensive adjustment work by a qualified technician.
  e. When the product has been dropped or damaged.
  f. When the product displays an abnormal condition. Any noticeable abnormality in the product indicates that the product needs servicing.
- Replacement parts—In case the product needs replacement parts, make sure that the service person uses replacement parts specified by the manufacturer, or those with the same characteristics and performance as the original parts. Use of unauthorized parts can result in fire, electric shock and/or other danger.
- Safety checks—Upon completion of service or repair work, request the service technician to perform safety checks to ensure that the product is in proper operating condition.
- Wall or ceiling mounting—When mounting the product on a wall or ceiling, be sure to install the product according to the method recommended by the manufacturer.

■ Cleaning—Unplug the power cord from the AC outlet before cleaning the product. Use a damp cloth to clean the product. Do not use liquid cleaners or aerosol cleaners.

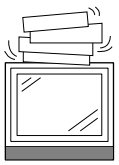


■ Water and moisture—Do not use the product near water, such as bathtub, washbasin, kitchen sink and laundry tub, swimming pool and in a wet basement.

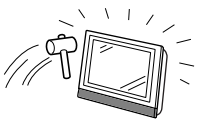
■ Stand—Do not place the product on an unstable cart, stand, tripod or table. Placing the product on an unstable base can cause the product to fall, resulting in serious personal injuries as well as damage to the product. Use only a cart, stand, tripod, bracket or table recommended by the manufacturer or sold with the product. When mounting the product on a wall, be sure to follow the manufacturer's instructions. Use only the mounting hardware recommended by the manufacturer.

■ When relocating the product placed on a cart, it must be moved with utmost care. Sudden stops, excessive force and uneven floor surface can cause the product to fall from the cart.

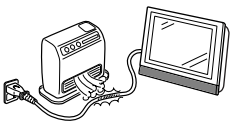
■ Ventilation—The vents and other openings in the cabinet are designed for ventilation. Do not cover or block these vents and openings since insufficient ventilation can cause overheating and/or shorten the life of the product. Do not place the product on a bed, sofa, rug or other similar surface, since they can block ventilation openings. This product is not designed for built-in installation; do not place the product in an enclosed place such as a bookcase or rack, unless proper ventilation is provided or the manufacturer's instructions are followed.



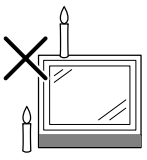
■ The LCD panel used in this product is made of glass. Therefore, it can break when the product is dropped or applied with impact. Be careful not to be injured by broken glass pieces in case the LCD panel breaks.



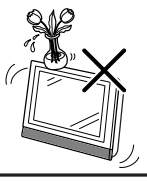
■ Heat sources—Keep the product away from heat sources such as radiators, heaters, stoves and other heat-generating products (including amplifiers).



■ To prevent fire, never place any type of candle or naked flames on the top or near the TV set.



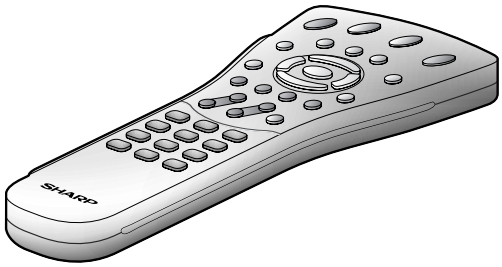
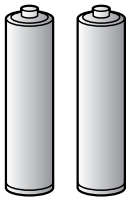
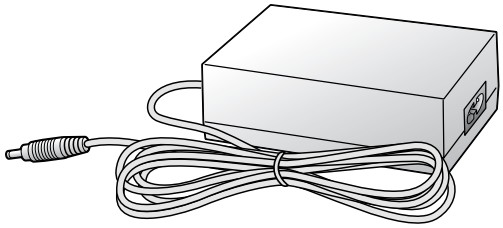
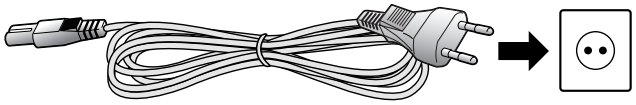
■ To prevent fire or shock hazard, do not expose this product to dripping or splashing. No objects filled with liquids, such as vases, should be placed on the product.



The LCD panel is a very high technology product with 921,600 thin film transistors, giving you fine picture details. Occasionally, a few non-active pixels may appear on the screen as a fixed point of blue, green or red. Please note that this does not affect the performance of your product.

Supplied Accessories

Make sure the following accessories are provided with the product.

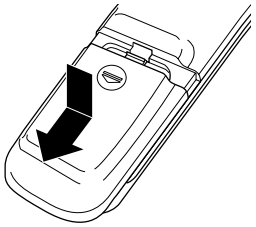
Wireless remote control (×1)	R-03 (“AAA” size, UM/SUM-4) dry battery (×2)
	
AC adapter (×1)	**AC cord (×1)**
	 *Product shape varies in some countries.
Cable clamp (×1)	**Operation manual (×1)**

Preparation

Installing Batteries in the Remote Control

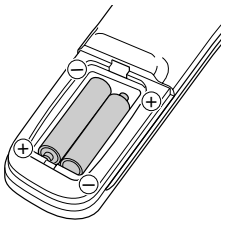
Before using the LCD TV set for the first time, install the two R-03 (“AAA” size, UM/SUM-4) batteries supplied in the remote control. When the batteries become depleted and the remote control fails to operate, replace the batteries with new R-03 (“AAA” size, UM/SUM-4) batteries.

1 Open the battery cover.



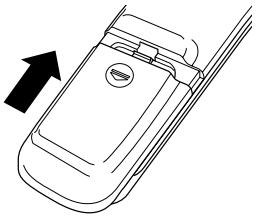
■ Slide the cover while pressing the (▾) part.

2 Insert two R-03 (“AAA” size, UM/SUM-4) batteries.



■ Position the positive and negative ends of the batteries as indicated in the compartment.

3 Replace the battery cover.



■ Engaging the lower claw with the remote control, close the cover.

⚠ Caution!

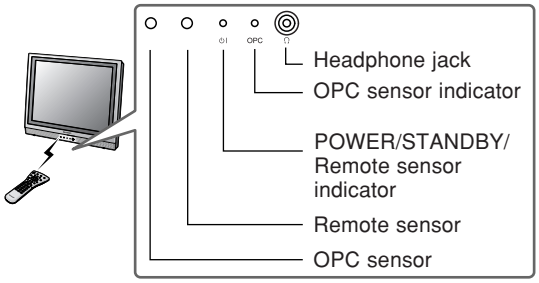
Precautions regarding batteries

■ Improper use of batteries can result in a leakage of chemicals and/or explosion. Be sure to follow the instructions below.

- Place batteries with their terminals corresponding to the (+) and (–) indications.
- Different types of batteries have different characteristics. Do not mix batteries of different types.
- Do not mix old and new batteries. Mixing old and new batteries can shorten the life of new batteries and/or cause old batteries to leak chemicals.
- Remove batteries as soon as they are depleted. Chemicals that leak from batteries can cause a rash. If chemical leakage is found, wipe it off with a cloth.
- The batteries supplied with the product may have a shorter life expectancy due to storage conditions.
- If the remote control is not to be used for an extended period of time, remove the batteries from the remote control.

Using Remote Control

■ Use the remote control by pointing it towards the remote sensor window of the main unit. Objects between the remote control and sensor window may prevent proper operation.

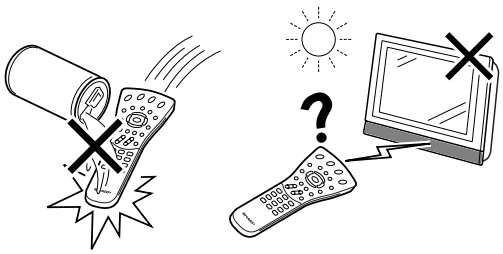


Cautions regarding use of remote control

■ Do not expose the remote control to shock. In addition, do not expose the remote control to liquids, and do not place it in an area with high humidity.

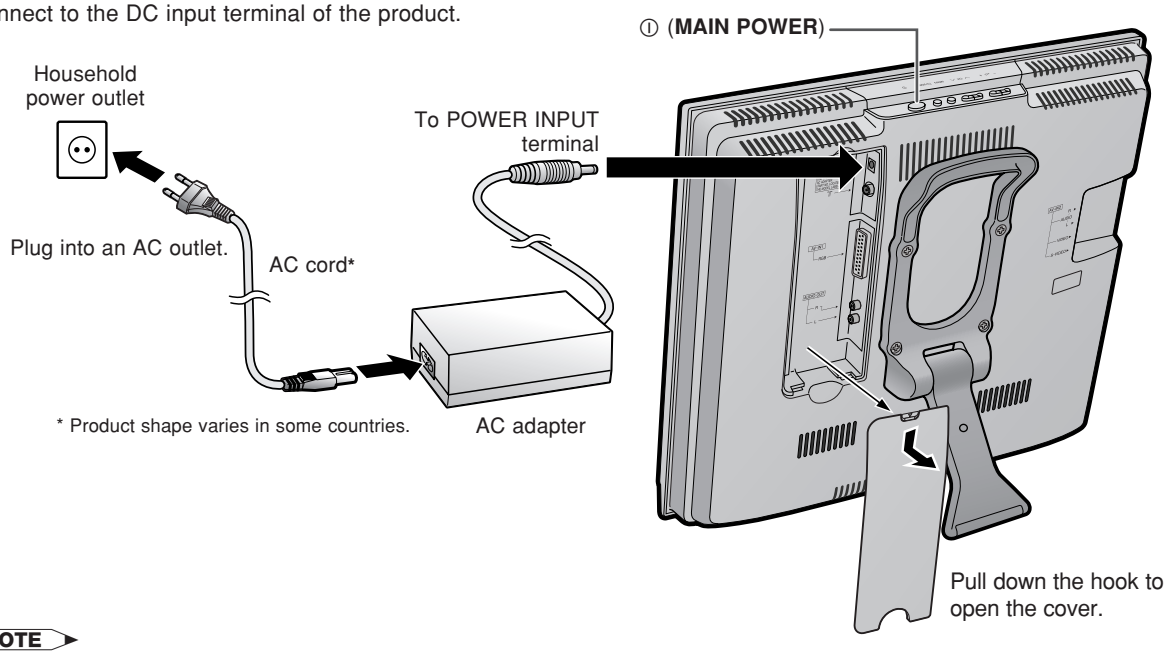
■ Do not install or place the remote control under direct sunlight. The heat may cause deformation of the unit.

■ The remote control may not work properly if the remote sensor window is under direct sunlight or strong lighting. In such a case, change the angle of the lighting or main unit, or operate the remote control closer to the remote sensor window.



Power Connection

Connect to the DC input terminal of the product.



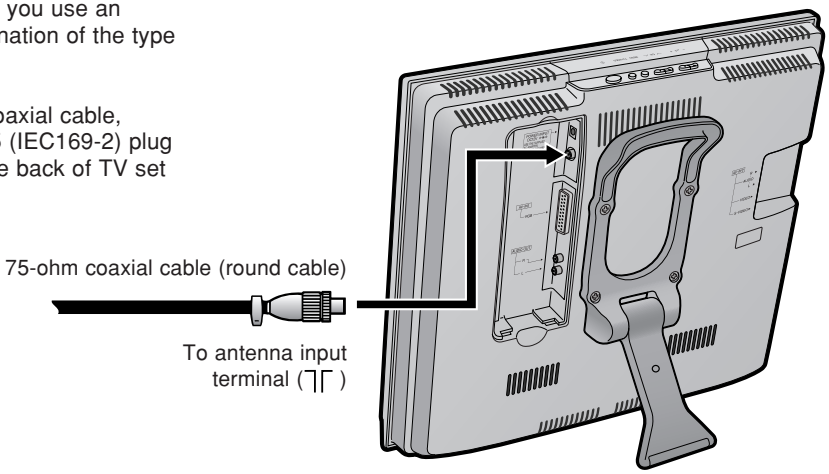
NOTE

- Always turn the ⏻ **(MAIN POWER)** switch of the LCD TV set to OFF when connecting the AC adapter.
- Unplug the AC adapter from the LCD TV set and power outlet when the LCD TV set is not to be used for a long period of time.

Antenna Connection

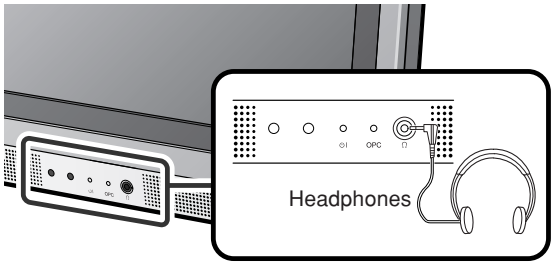
To enjoy a clearer picture, we recommend that you use an outdoor antenna. The following is a brief explanation of the type of connection that is used for coaxial cable:

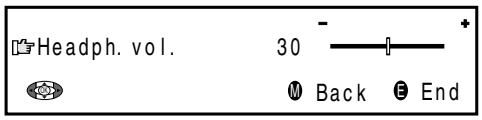
If your outdoor antenna uses a 75-ohm coaxial cable, change this for a new standard DIN45325 (IEC169-2) plug and plug it into the antenna terminal at the back of TV set via the antenna cable (not supplied).



Listening with Headphones

■ Plug the headphone mini-plug into the Headphone jack located on the front of the TV set.





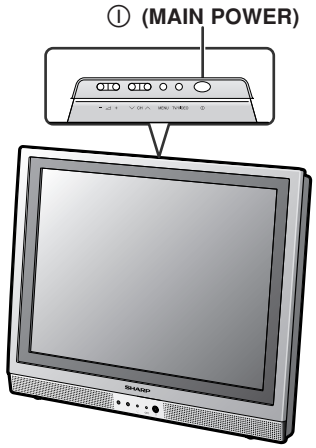
Please refer to page 15 to adjust the sound volume.

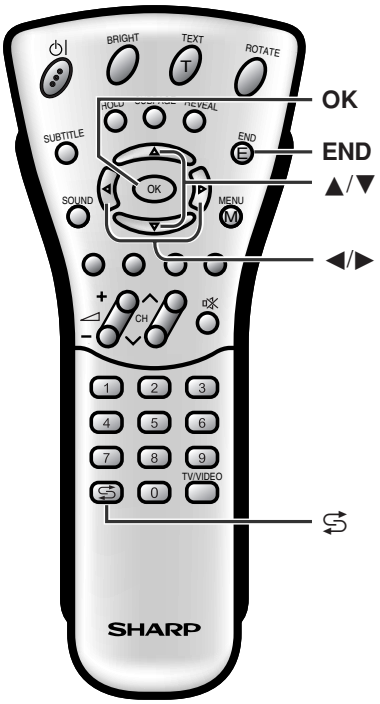
NOTE

- Headphones are not included in the supplied accessories.
- Even if a headphone mini-plug is connected to the Headphone jack, sound can be heard from the main unit speaker.

First Installation

When you turn on the LCD TV set for the first time, the First Installation routine, which makes installation easier, is activated. Using this routine, you can select the on-screen display language, and automatically search for and store all the receivable channels.



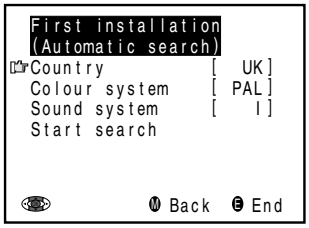


1 Press the ⏻ **(MAIN POWER)** switch. The “First installation (Language)” screen with a list of the languages for the on-screen display appears.

2 Press ▲/▼ to select the desired language, and then press **OK**. The “First installation (Automatic search)” screen appears in the language selected.

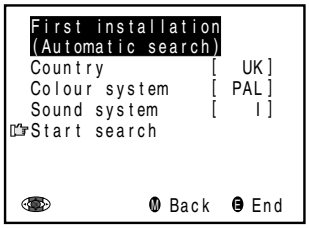
NOTE

- You can change the on-screen display language after the First Installation routine by selecting “Language” on the TV menu (see pages 13 and 14).

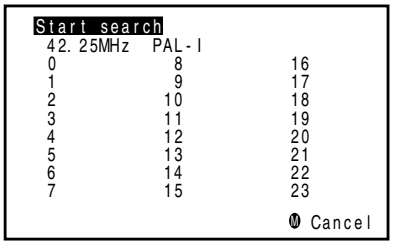


3 Press ▲/▼ to select the desired adjustment item, and then press **OK**. Then press ◀/▶ to select the desired item.

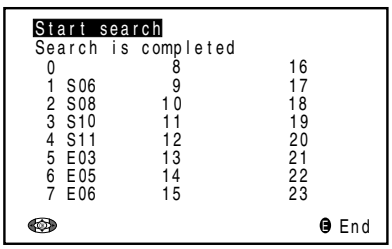
4 Press ▲/▼ to select “Start search”.



5 Press **OK** to begin the automatic programme search.



When the search is completed, the new programmes found are displayed in yellow on the programme list.



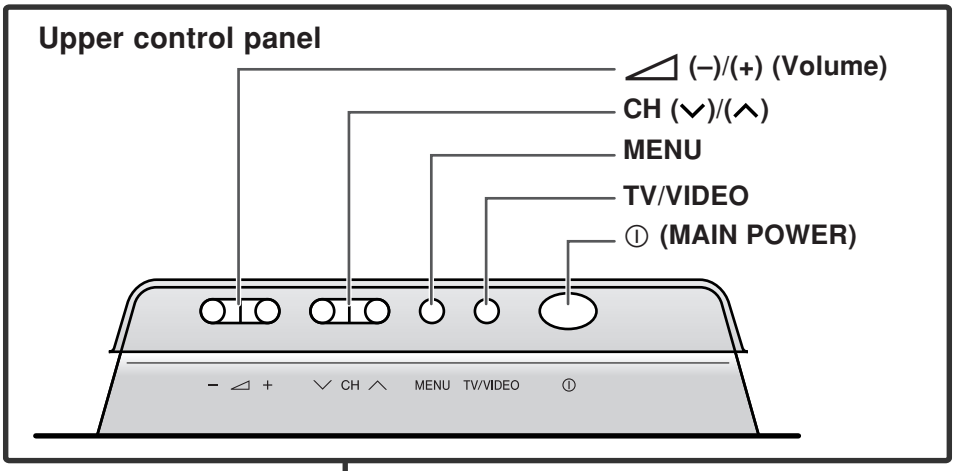
6 Press **END** to exit.

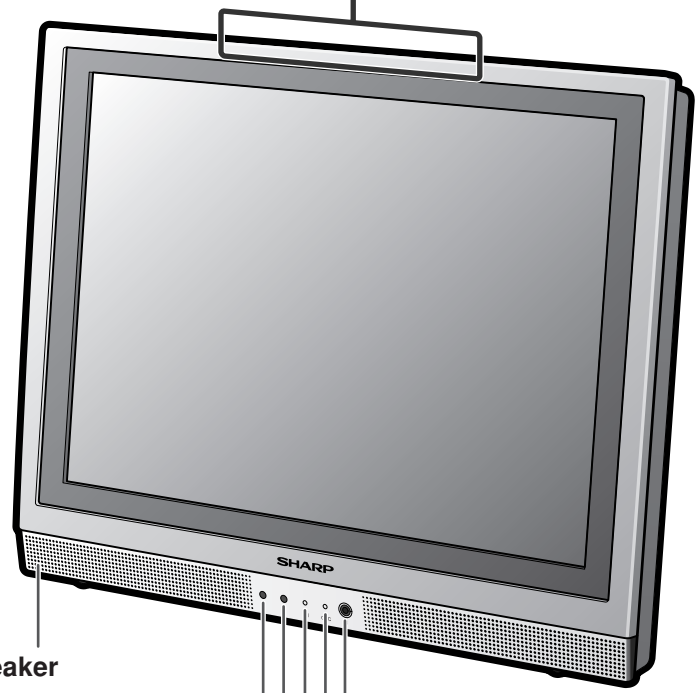
NOTE

- AV1 is automatically switched to, when “First installation” is selected. If you selected “First installation”, and want to return to the previous screen, press **Flashback** (⇆).

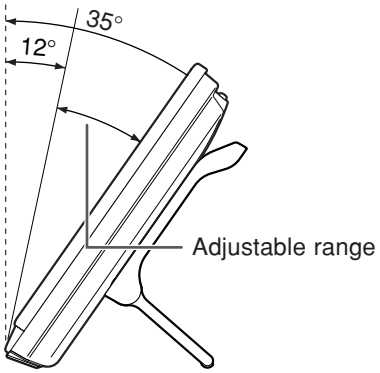
Part Names of Main Unit

Controls





The screen can be adjusted backwards to an angle between 12 degrees and 35 degrees. The screen cannot be set up straight. When changing the angle, make sure to hold the stand and adjust the screen to the best viewable angle.



Speaker

OPC sensor

Remote sensor

Headphone jack
Plug the headphone mini-plug into the Headphone jack located on the front of the TV set.

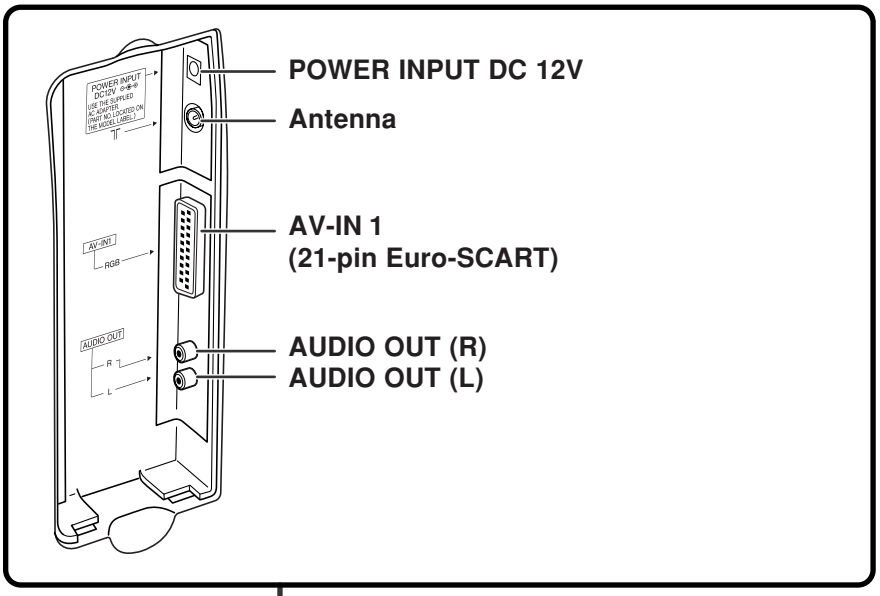
OPC sensor indicator (Optical Picture Control)
The Optical Picture Control indicator lights up green when the Brightness is set to Auto. (See pages 21 and 22.)

POWER/STANDBY/Remote sensor indicator
A green indicator lights when the power is on and a red indicator lights when in the standby mode (the indicator will not light when the main power is off). A red indicator blinks when the TV set receives the remote control signal.

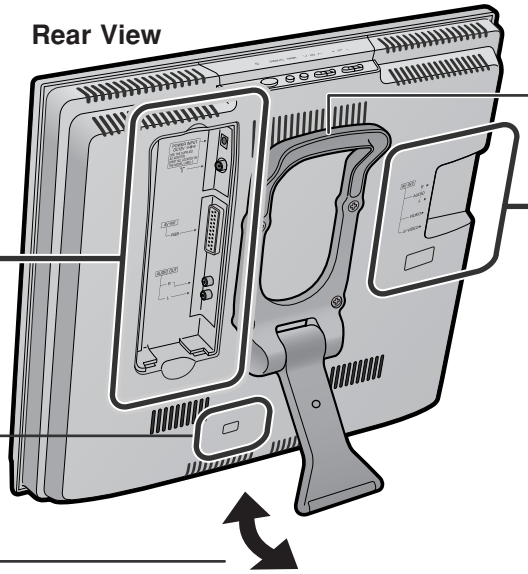
NOTE

- **TV/VIDEO**, **CH (∨)/(∧)** **(–)/(+) (Volume)** and **MENU** on the main unit have the same functions as the same buttons on the remote control. Fundamentally, this operation manual provides a description based on operation using the remote control.

Terminals

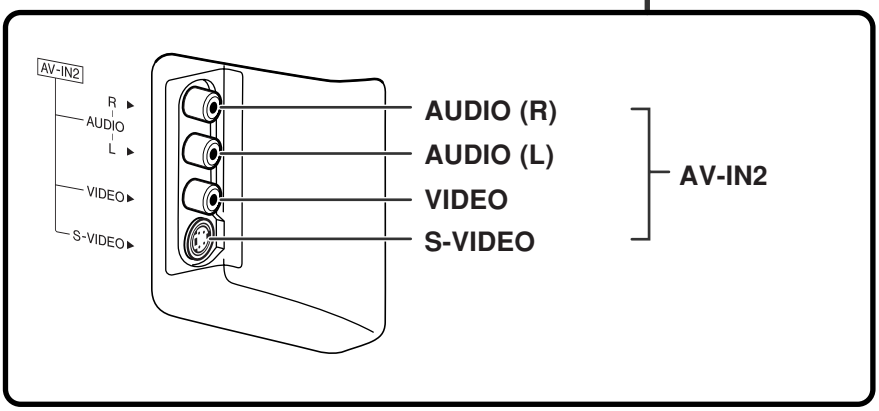


Rear View

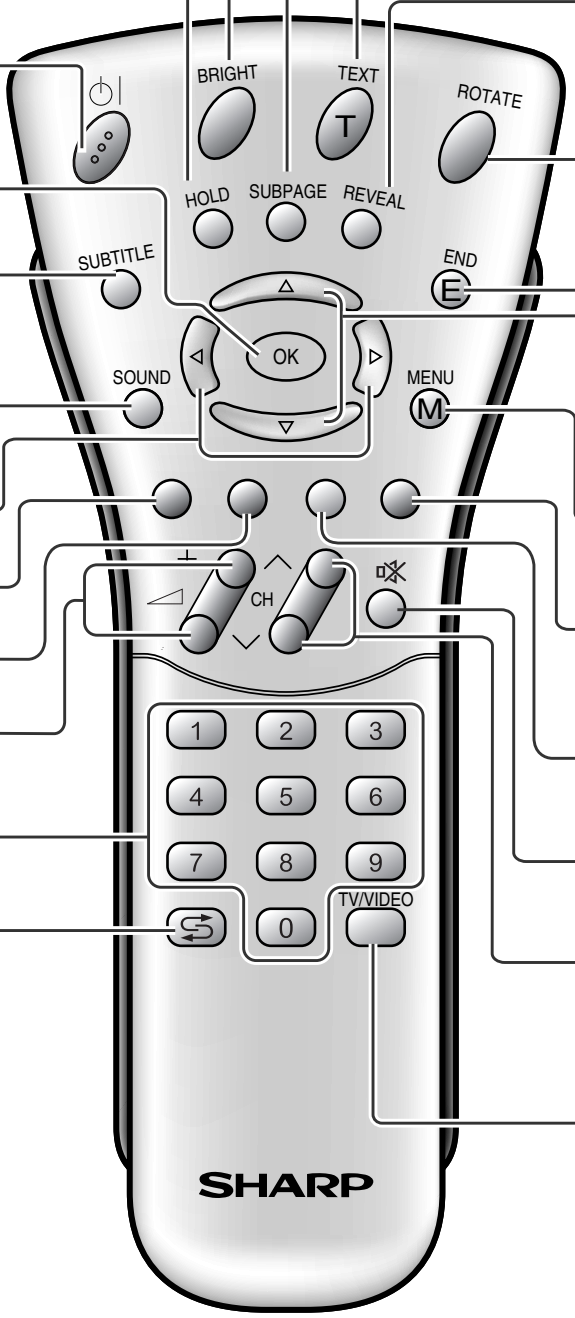


- The screen can be adjusted backwards to an angle between 12 and 35 degrees.
  When changing the angle, make sure to hold the stand and adjust to the best viewable angle.

* Be careful to prevent the product from falling over when adjusting the angle. Also place the product on a stable base.



Part Names of Remote Control



BRIGHT
Selects the brightness and OPC of the display. (P. 22)

HOLD
Temporarily holds the current Teletext page. (P. 34)

(Power) (P. 11)

OK, Programme Table (P. 7)

SUBTITLE
Displays the Teletext Subtitle directly. (P. 34)

SOUND
Switches the sound mode. (P. 30)

Right / Left Selection (P. 7)

Red, Picture Menu (P. 15)

Green, Sound Menu (P. 15)

(+)/(-) (Volume) (P. 12)

Channel Select (P. 12)

(Flashback)
Returns to the previous channel. (P. 7)

SUBPAGE
Displays the Teletext Subpage directly. (P. 33)

TEXT
Displays the Teletext mode screen. (P. 32)

REVEAL
Displays hidden information such as solutions to riddles and puzzles. (P. 34)

ROTATE
Rotates the display in every direction. (P. 22)

END
Returns to normal screen. (P. 7)

Upwards/Downwards Selection, zoom display function (Teletext mode) (P. 7)

MENU
Displays the TV menu. (P. 13)

Cyan, Status Display
Turns on the status display when the menu is not displayed. (P. 23)

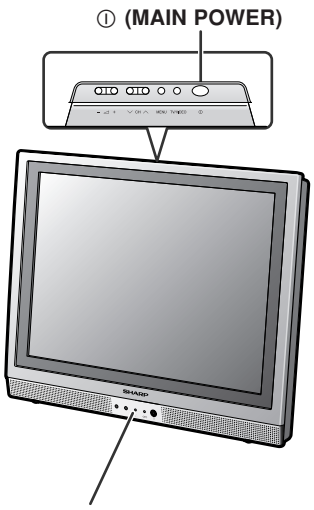
Yellow, Timer function Menu (P. 29)

(Mute)
Switches the sound on and off. (P. 12)

CH (∧)/(∨)
Displays previous/next page. (Teletext mode) (P. 12)

TV/VIDEO
Switches the input source between AV1, AV2 and TV mode. (P. 11)

Basic Operation



Turning On and Off the Main Power

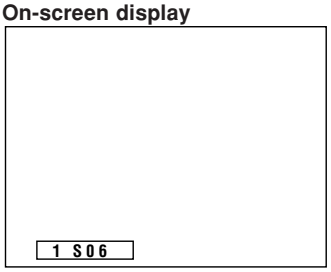
- Press the ⏻ **(MAIN POWER)** switch. The POWER/STANDBY/Remote sensor indicator instantaneously changes from blinking red to green and the main unit is turned on.

  NOTE

  • The On-screen indicator disappears after a few seconds.

- To turn off the main power, press the ⏻ **(MAIN POWER)** switch.

On-screen display



ON/OFF Standby

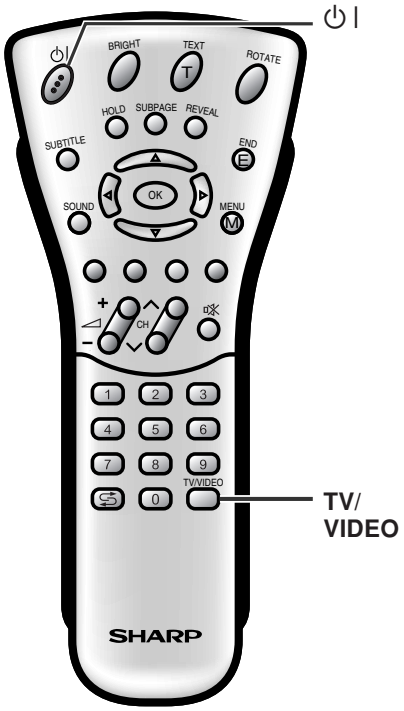
To turn off the LCD TV

Press ⏻ |. The POWER/STANDBY/Remote sensor indicator will turn red.

To turn the LCD TV back on

Press ⏻ | again. The POWER/STANDBY/Remote sensor indicator will turn green.

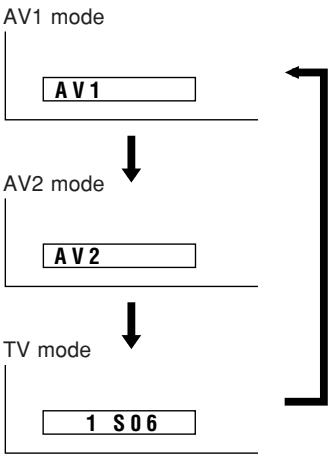
Switching the TV/VIDEO (AV1/AV2/TV) Mode

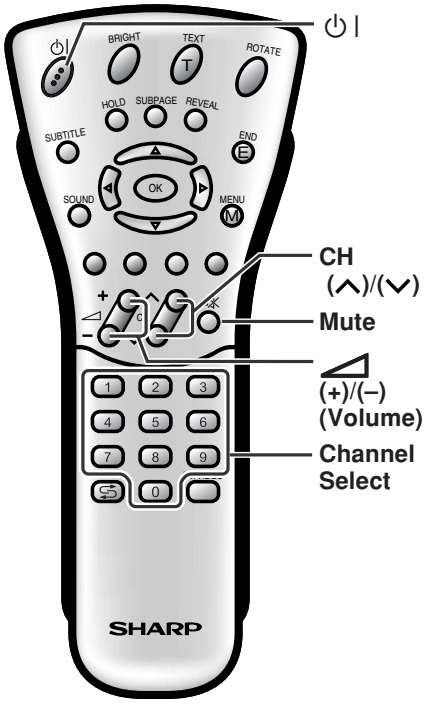


1. Turn on the power of the connected video equipment.
2. Press **TV/VIDEO** to select the applicable input source. The screen displays AV1, AV2 or TV mode each time **TV/VIDEO** is pressed.

NOTE

- About the video modes
  - AV1: Select this when viewing the signals from the video equipment connected to the AV-IN 1 terminal.
  - AV2: Select this when viewing the signals from the video equipment connected to the AV-IN 2 terminals using the VIDEO or S-VIDEO terminal for video input.
- If both VIDEO and S-VIDEO terminals are connected with cables, the S-VIDEO input terminal is selected as the high priority.





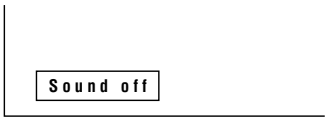
Sound Volume

To adjust the volume

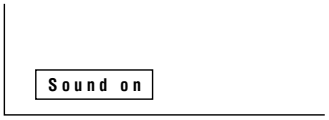
- Press (+) to increase the sound volume. The numerical value increases.
- Press (–) to decrease the sound volume. The numerical value decreases.

To mute the sound

- Press **Mute** to temporarily turn off the sound. “Sound off” is displayed.



- Press **Mute** to turn off the Mute function. “Sound on” is displayed.



NOTE

- When (+)/(–) is pressed in the Mute mode, the sound turns on and the volume indicator is displayed.
- The Mute function is cancelled when ⏻ | is pressed.

Changing Channels

You can select channels using **Channel Select** or **CH (∧)/(∨)**.

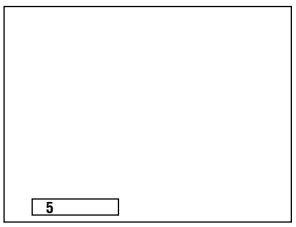
- To handle the increasing number of channels available, this LCD TV set allows you to select up to 200 channels (0 to 199).

Using Channel Select

When selecting the channel using **Channel Select**, finish inputting the channel number by holding down the button for the last digit for a moment.

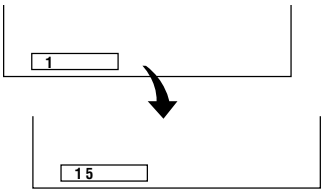
To select a one-digit channel (e.g. Channel 5):

1. Hold down the 5 button.



To select a two/three-digit channel (e.g. Channel 15):

1. Press the 1 button.
2. Hold down the 5 button.



Using CH (∧)/(∨)

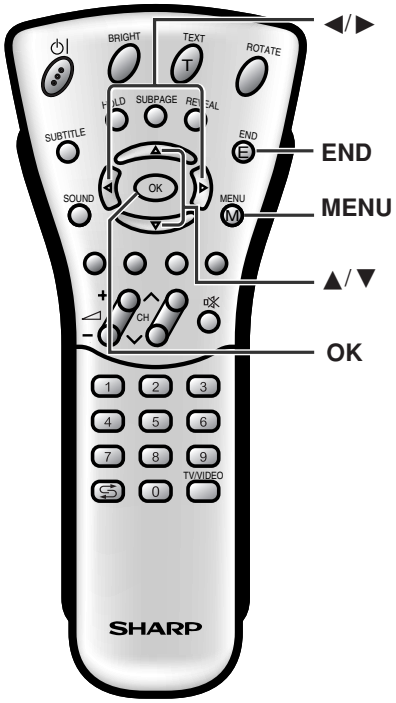
Press **CH (∧)** and the channels change in the order shown below:
1 → 2 → 3 → . . . → 198 → 199 → 0 → 1 → 2 → 3 → . . .

Press **CH (∨)** and the channels change in the order shown below:
3 → 2 → 1 → 0 → 199 → 198 → . . . → 3 → 2 → 1 → . . .

NOTE

- Channel “0” is prepared for RF output of VCR.

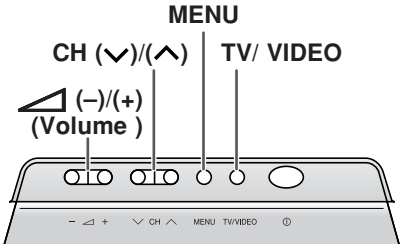
Selecting Menu Items



• The menus can be used to adjust the various settings of your LCD TV set. Select the desired menu item by following the steps below.

■ Using TV Menus

1. Press **MENU** on the remote control to display the TV menu.
2. Press ▲/▼ to select the desired menu item.
   - The cursor moves up or down.
   - The cursor indicates the selected menu item.
3. Press **OK** to display the setting screen for the selected menu item.
   - Press **OK** again to adjust the selected item.
   - See the next page for a table of the setting screens.
4. Press ◀/▶ to adjust the selected item.
5. Press **MENU** to return to the previous screen or **END** to return to the normal screen.



Control panel of the main unit

■ Using Direct Control Menu

1. Press **MENU** on the main unit to display the TV menu.
2. Press **CH (∨)/(∧)** to select the desired menu item.
   - The cursor moves up or down.
   - The cursor indicates the selected menu item.
3. Press **TV/VIDEO** to display the setting screen for the selected menu item.
   - Press **TV/VIDEO** again to adjust the selected item.
4. Press **(–)/(+)** to make the adjustment.
5. Press **MENU** to return to the previous screen.
   - Each time **MENU** is pressed, you will return to the previous screens.

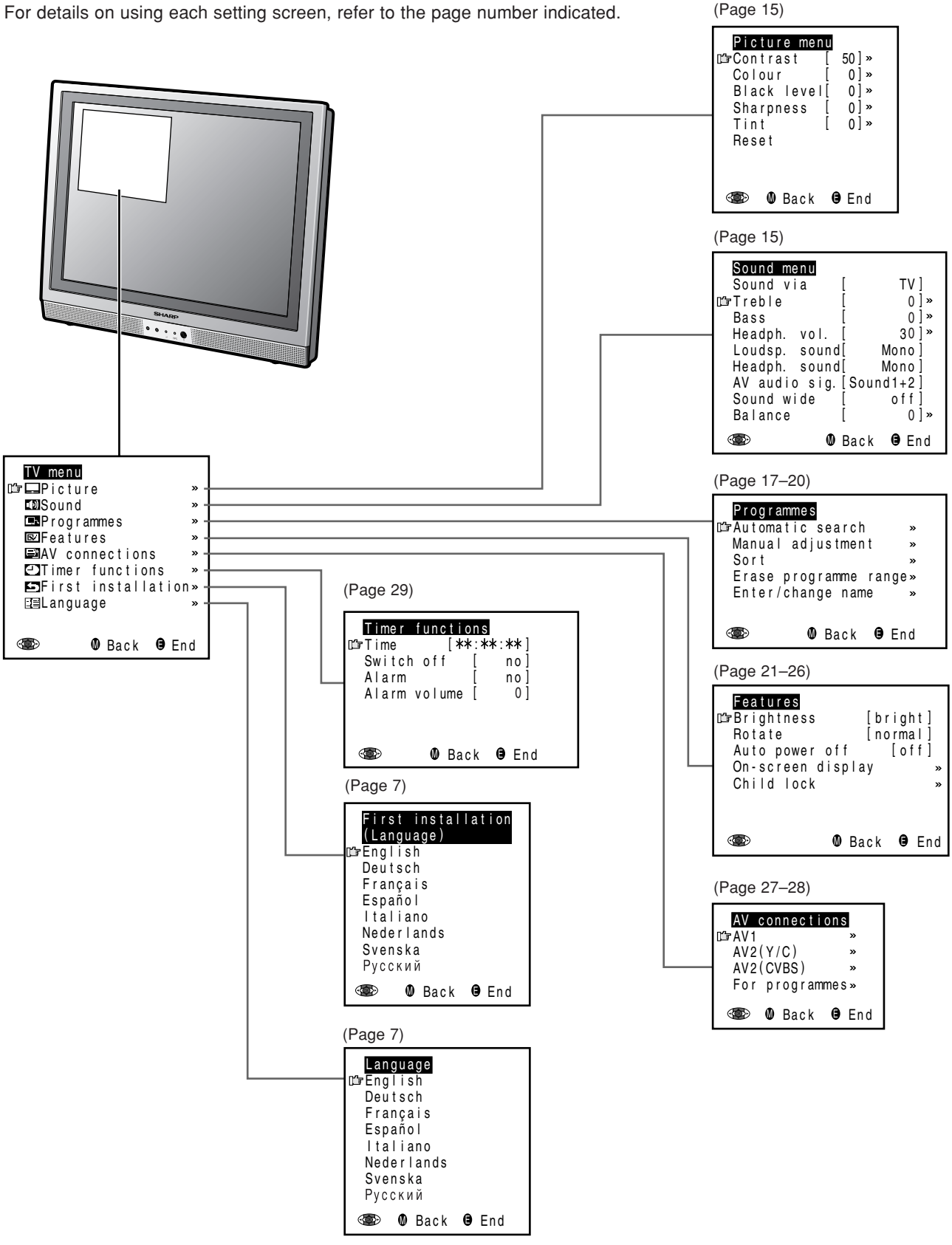
NOTE

- The items displayed differ depending on the setting conditions.
- The item selected is displayed in yellow.
- The adjustment values and settings which were changed before the screen is restored are saved in the memory.

Selecting Menu Items (Continued)

■ TV Menu Setting Screens

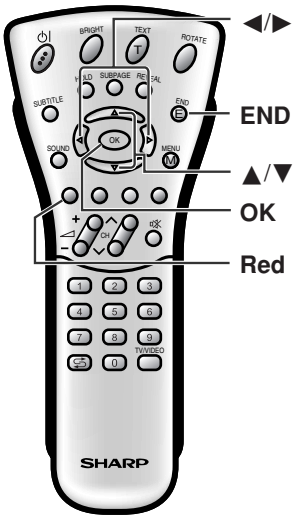
For details on using each setting screen, refer to the page number indicated.



NOTE

- The illustrations and on-screen displays in this manual are for explanation purposes and may vary slightly from the actual operations.

Useful Features

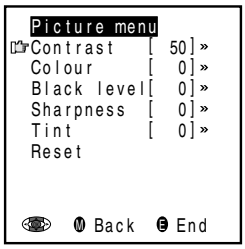


Adjusting Picture Settings

1 Press **Red** to display the Picture menu.

NOTE

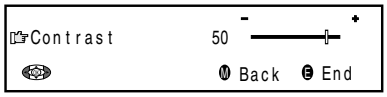
- The Picture menu can also be displayed by selecting “Picture” in the TV menu (see pages 13 and 14).



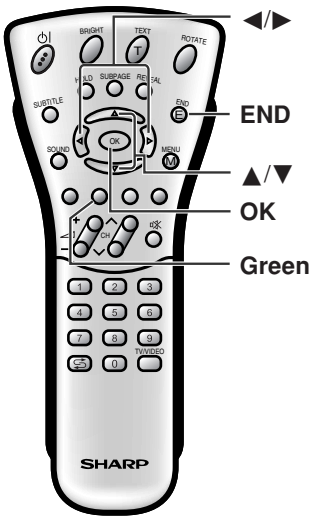
2 Press ▲/▼ to select the desired adjustment item, and then press **OK**.
- The next menu appears.

3 Press ◀/▶ to make the adjustment.

4 Press **END** to exit.



Adjustment item	Press Left (◀)	Choice/Value range	Press Right (▶)
Contrast	Decrease contrast	0 – 60	Increase contrast
Colour	Lower colour intensity	-30 – 30	Higher colour intensity
Black level	Less brightness	-30 – 30	More brightness
Sharpness	Soft picture	-5 – 5	Sharp picture
Tint	Towards purple	-30 – 30	Towards green
Reset	Reset value (Press **OK**.)		

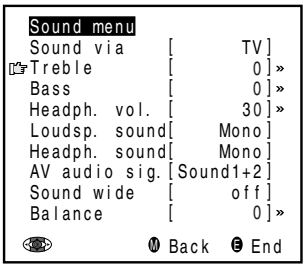


Adjusting Sound Settings

1 Press **Green** to display the Sound menu.

NOTE

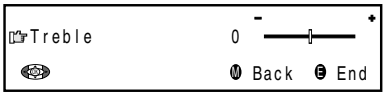
- The Sound menu can also be displayed by selecting “Sound” in the TV menu (see pages 13 and 14).



2 Press ▲/▼ to select the desired adjustment item, and then press **OK**.
- Each item can now be selected or the next menu appears.

3 Press ◀/▶ to make the adjustment.

4 Press **END** to exit.

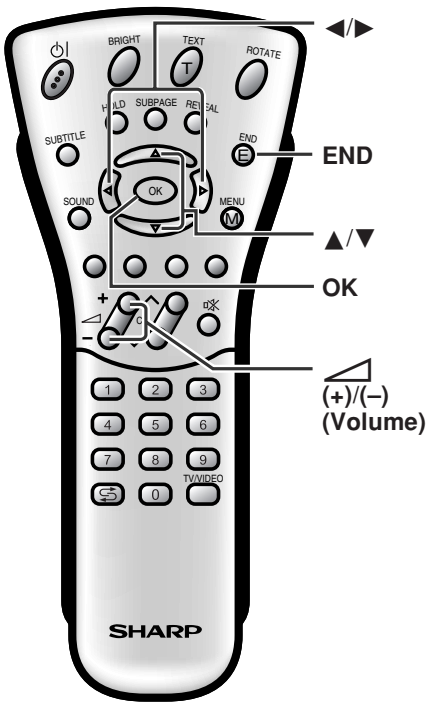


Adjustment item	Press Left (◀)	Choice/Value range	Press Right (▶)
Sound via	–	TV⟷Hi-fi	–
Treble*	For weaker treble	-15 – 15	For stronger treble
Bass*	For weaker bass	-15 – 15	For stronger bass
Headph. vol.*	Decrease headphones volume	0 – 60	Increase headphones volume
Loudsp. sound	–	Stereo⟷Mono/Sound1⟷Sound2⟷Sound1+2⟷Mono Nicam⟷Mono/Mono (* The choices differ depending on whether or not a NICAM or A2 stereo signal is received.) See pages 30 and 31.	–
Headph. sound*			
AV audio sig.	–	Sound1⟷Sound2⟷Sound1+2	–
Sound wide*	–	off⟷on	–
Balance*	Increase the volume of the left speaker	-15 – 15	Increase the volume of the right speaker

* These items are not displayed when the “Sound via” item is set to “Hi-fi”.

NOTE

- In the “AV audio sig.” item, mono-video recorders should select “Sound1” or “Sound2”. Stereo-video recorders should select “Sound1+2” so that the desired sound can be selected when playing back the video.



Hi-fi Sound Settings

This programme allows you to enjoy higher sound quality when connecting the AUDIO OUT terminals to an external amplifier using an audio cord.

1. When switching “Sound via” to “Hi-fi” in the Sound menu on page 15, the sound from the built-in speakers will be turned off.
2. Press ▲/▼ to select the desired adjustment item, and then press **OK**.
3. Press ◀/▶ to select the Sound mode.
4. Press **END** to exit.

NOTE

- Pressing (+)/(–) will display the volume indicator shown on the right. You can adjust the volume by pressing + or – on the same button.

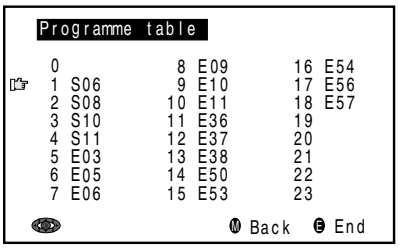
* To exit this mode, in the Sound menu, switch “Sound via” from “Hi-fi” to “TV”.

Using Programme Table

The Programme table shows a list of all receivable programmes. They are located in channels 0 to 199. The currently selected programme is displayed in yellow, and the child-locked programmes are displayed in red.

To select the desired programme

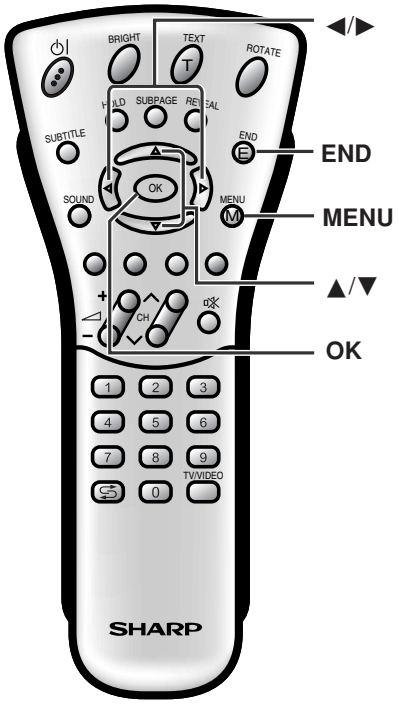
1. Press **OK** to display the Programme table.
2. Press ▲/▼ and/or ◀/▶ to select the desired programme.
   - To display the next or previous list of the Programme table, press ▲/▼ when the cursor is at a programme in the lower-right or upper-left position, or press ◀/▶ when the cursor is at a programme in the right or left column.
3. Press **OK** to display the selected programme.



Programmes

[1] Automatic search

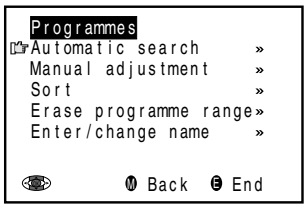
Perform the procedure below to search for and store new programmes after the First Installation routine.



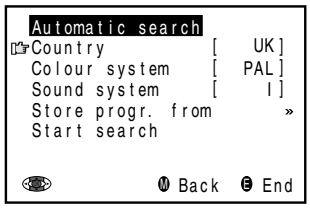
1 Press **MENU** to display the TV menu.

2 Press ▲/▼ to select “Programmes”, and then press **OK** to display the “Programmes” screen.

3 Press ▲/▼ to select “Automatic search”, and then press **OK** to display the “Automatic search” screen.



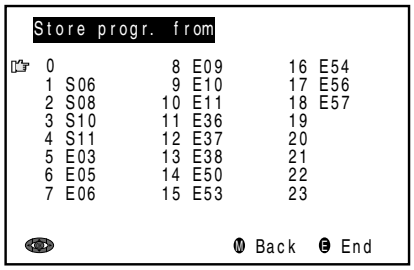
4 Press ▲/▼ to select the desired item, and then press **OK**.
Press ◄/► to select the desired item.



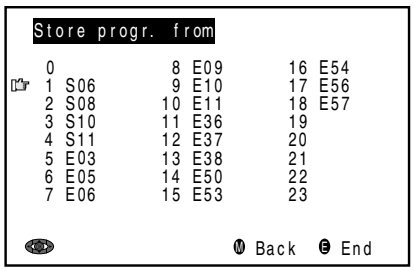
NOTE

- You can change “Colour system” and “Sound system” only when other country is selected in “Country”.

5 Press ▲/▼ to select “Store progr. from”, and then press **OK** to display the “Store progr. from” screen.



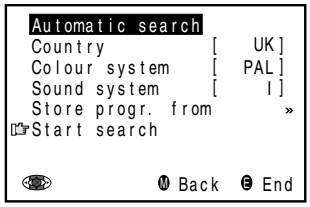
6 Press ▲/▼ and/or ◄/► to select the programme position from which the programmes are to be stored, and then press **OK**.



7 Press ▲/▼ to select “Start search”, and then press **OK** to begin the automatic programme search.

NOTE

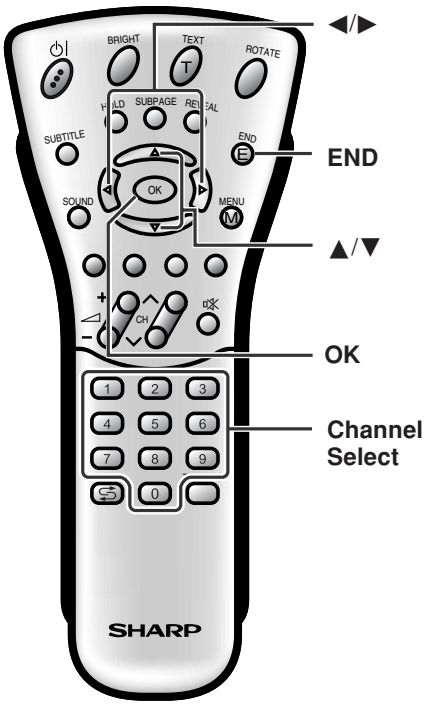
- See page 7 for details of the search process.



8 After the search is completed, press **END** to exit.

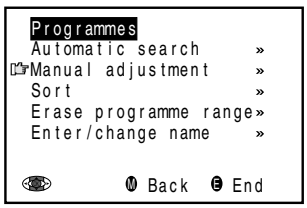
Programmes (Continued)

[2] Manual adjustment
Individual settings of programmes can be adjusted.

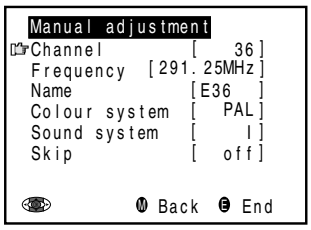


1 Perform steps **1** and **2** in **[1] Automatic search** to display the “Programmes” screen.

2 Press ▲/▼ to select “Manual adjustment”, and then press **OK** to display the “Manual adjustment” screen.



3 Press ▲/▼ to select the item, and then press ◀/▶ to make the adjustment. (See the table below for details.)
- You can also use **Channel Select** to adjust the “Frequency” items.
- To adjust “Name”, first press **OK** to active the text input mode. Press ◀/▶ to select the input position and press ▲/▼ to select the desired character. When you finish inputting, press **OK** to set the name.



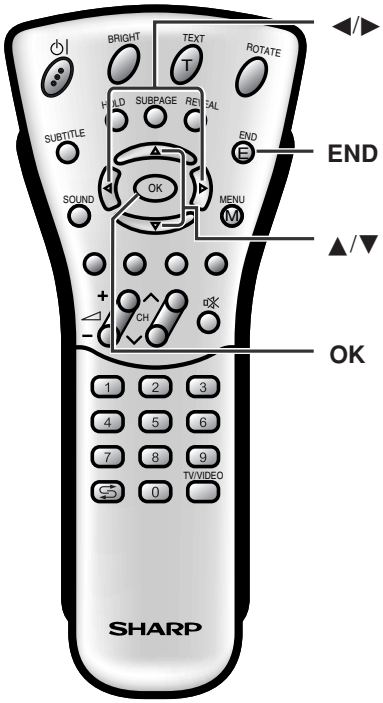
4 Press **END** to exit.

Adjustment item	Choice/Value range	Description
Channel	0–199	The channel changes to the higher or lower channel.
Frequency	044 – 859 (MHz)	Receivable frequencies depending on TV norm, installation site, and range.
Name	A – Z, +, -, ., !, /, 0 – 9	Programme name (up to five characters).
Colour system	Auto, PAL, SECAM	Colour norm.
Sound system	B/G, I, D/K, L, Auto*	TV norm.
Skip	on ⟷ off	Channel numbers with a “(•) (RED)” mark on the left are set to SKIP.

* This item “Auto” in “Sound system” is only visible when the “Colour system” is set to “Auto”.

NOTE

- Depending on the settings in the colour system of the channels, switching between channels may be slow. If you want to speed up channel switching, switch “Auto” in “Colour system” to the current reception system (PAL or SECAM).



Programmes (Continued)

[3] Sort

The programme positions for individual programmes can be freely changed.

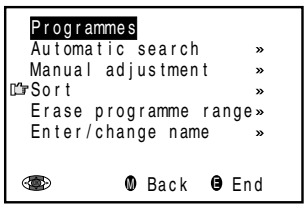
1 Perform steps **1** and **2** in **[1] Automatic search** to display the “Programmes” screen.

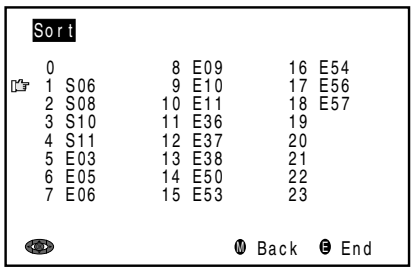
2 Press ▲/▼ to select “Sort,” and then press **OK** to display the “Sort” screen.

3 Press ▲/▼ and/or ◄/► to select the desired programme, and then press **OK** to sort.

- When **OK** is pressed, the Move mode is activated. Press ▲/▼ to move the currently marked programme to the desired programme position. The marked programme is swapped with the programme at the selected programme position. Press **OK** to leave the Move mode.

4 Press **END** to exit.





Programmes (Continued)

[4] Erase programme range

The individual programme or programmes in a connected range can be erased.

1 Perform steps **1** and **2** in **[1] Automatic search** to display the “Programmes” screen.

2 Press ▲/▼ to select “Erase programme range”, and then press **OK** to display the “Erase programme range” screen.

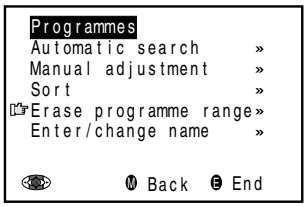
3 Press ▲/▼ and/or ◄/► to select the programme to be erased, and then press **OK**. The selected programme is shown in yellow.

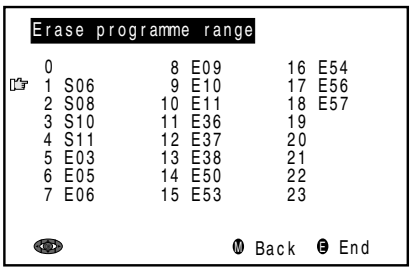
- If you want to erase programmes in a connected range, select the programme at the beginning of the desired range.

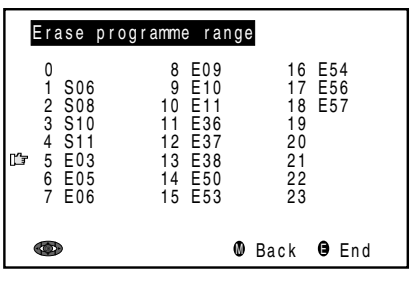
4 If you are erasing programmes in a connected range, press ▲/▼ and/or ◄/► to select the programme at the end of the range. The selected programmes are shown in yellow.

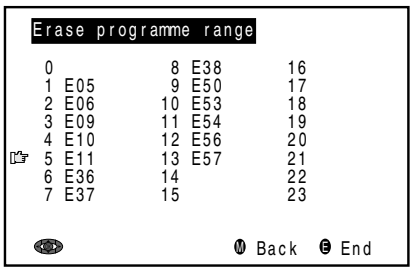
5 Press **OK** to erase the selected programme(s). All the subsequent programmes move up.

6 Press **END** to exit.





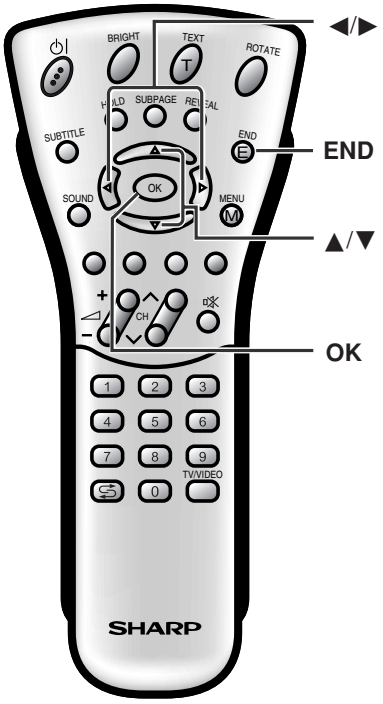




Programmes (Continued)

[5] Enter/change name

The name of an individual programme can be entered or changed.



1 Perform steps **1** and **2** in **[1] Automatic search** to display the “Programmes” screen.

2 Press ▲/▼ to select “Enter/change name”, and then press **OK** to display the “Enter/change name” screen.

```
Programmes
 Automatic search      »
 Manual adjustment     »
 Sort                  »
 Erase programme range »
☞Enter/change name     »

                 M Back  E End
```

3 Press ▲/▼ and/or ◀/▶ to select the desired programme, and then press **OK**. The character at the input position blinks.

```
Enter/change name

   0          8 E09      16 E54
☞ 1 _06       9 E10      17 E56
  2 S08      10 E11      18 E57
  3 S10      11 E36      19
  4 S11      12 E37      20
  5 E03      13 E38      21
  6 E05      14 E50      22
  7 E06      15 E53      23

                 M Back  E End
```

4 Press ◀/▶ to select the input position, and then press ▲/▼ to select the desired character.

```
Enter/change name

   0          8 E09      16 E54
☞ 1 S06       9 E10      17 E56
  2 S08      10 E11      18 E57
  3 S10      11 E36      19
  4 S11      12 E37      20
  5 E03      13 E38      21
  6 E05      14 E50      22
  7 E06      15 E53      23

                 M Back  E End
```

5 Press **OK** to accept the name entered, and then press **END** to exit.

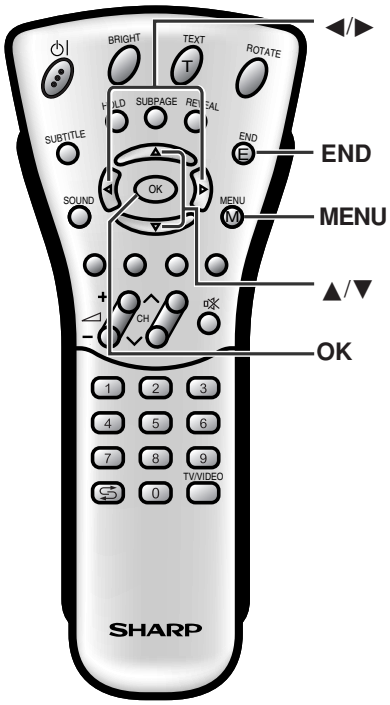
```
Enter/change name

   0          8 E09      16 E54
☞ 1 S06       9 E10      17 E56
  2 S08      10 E11      18 E57
  3 S10      11 E36      19
  4 S11      12 E37      20
  5 E03      13 E38      21
  6 E05      14 E50      22
  7 E06      15 E53      23

                 M Back  E End
```

Features

The Features items can be set by the user.



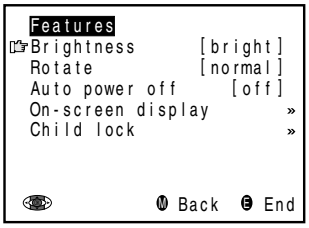
1 Press **MENU** to display the TV menu.

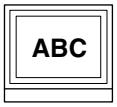
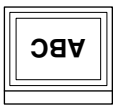
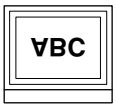
2 Press ▲/▼ to select “Features”, and then press **OK** to display the “Features” screen.

3 Press ▲/▼ to select the desired adjustment item, and then press **OK**.

4 Press ◀/▶ to make the adjustment. (Except “On-screen display” and “Child lock” menu items)

5 Press **END** to exit.

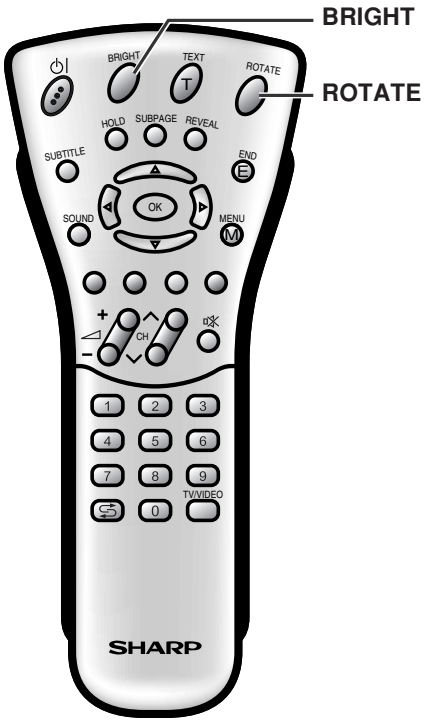


Selected item	Factory setting	Setting change
Brightness*	[bright] Maximum brightness	[medium] Brightness 60% → Suitable for viewing in well-lit areas. Saves energy. [dark] Brightness 20% → Sufficiently bright when viewing in dim areas. [Auto] Screen brightness adjusts according to the ambient light of the room.
Rotate*	[normal] Normal image orientation 	[mirror] Mirror image → To display mirror images for special uses. [rotate] Rotate image → To display rotated images for special uses  [upside down] Upside down image → To display upside down images for special uses. 
Auto power off (only TV mode)	[off] This feature is inactive.	[on] The power of the LCD TV set is turned off when there is no signal for 5 minutes.

* Brightness and Rotate can be switched in one touch using the remote control (see page 22).

Features (Continued)

You can change the setting screen of Brightness and Rotate directly.

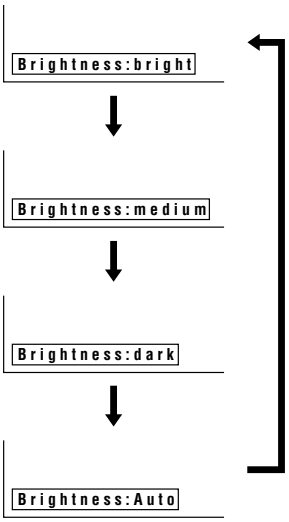


[1] Directly Setting the Brightness

1 Press **BRIGHT** to display the Brightness screen.

2 Each time you press **BRIGHT**, the mode changes as follows. You can select the desired mode.

bright ⟶ medium ⟶ dark ⟶ Auto



NOTE

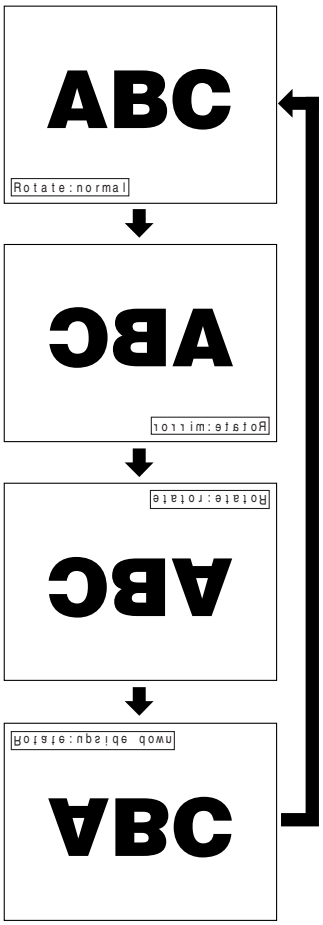
- The Brightness screen automatically disappears after 4 seconds.
- The Brightness is set to “bright” at the factory setting.
- See the table of page 21 for details of the each brightness setting.
- When set to “Auto”, make sure no object obstructs the OPC sensor, which could affect its ability to sense surrounding light.

[2] Directly Setting the Rotate

1 Press **ROTATE** to display the Rotate screen.

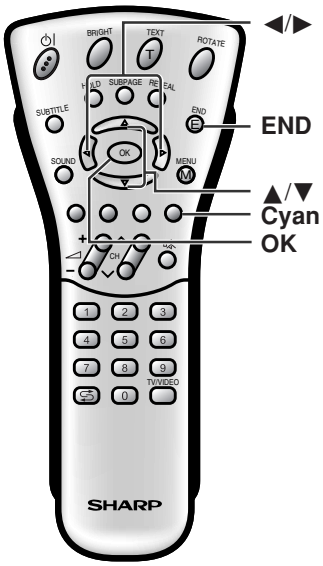
2 Each time you press **ROTATE**, the mode changes as follows. You can select the desired mode.

Rotate: normal (Normal image) ⟶ Rotate: mirror (Mirror image)
⟵ Rotate: upside down (Upside down image) ⟵ Rotate: rotate (Rotate image)



NOTE

- The Rotate screen automatically disappears after 4 seconds.
- The Rotate is set to “normal” at the factory setting.
- When changing settings directly made, settings in the menu can also be changed.
- See the table of page 21 for details of the each rotate setting.



On-screen Display

You can adjust various settings for on-screen displays.

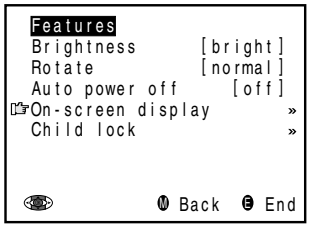
1 Perform steps **1** and **2** in **Features** to display the “Features” screen.

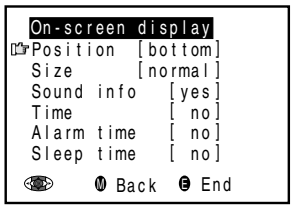
2 Press ▲/▼ to select “On-screen display” and then press **OK** to display the “On-screen display” screen.

3 Press ▲/▼ to select the desired adjustment item. (See the table below.)

4 Press ◀/▶ to make the adjustment.

5 Press **END** to exit.





Adjustment item	Choice/Value range	Description
Position	bottom ⟷ top	To select the position of the On-screen display.
Size	normal ⟷ half	To select the size of the On-screen display.
Sound info	no ⟷ yes	To select whether or not sound info is to be displayed, when a channel has been selected.
Time	no ⟷ yes	To select information to be displayed in the On-screen display. To activate the On-screen display, use the **Cyan** button.
Alarm time	no ⟷ yes	
Sleep time	no ⟷ yes	

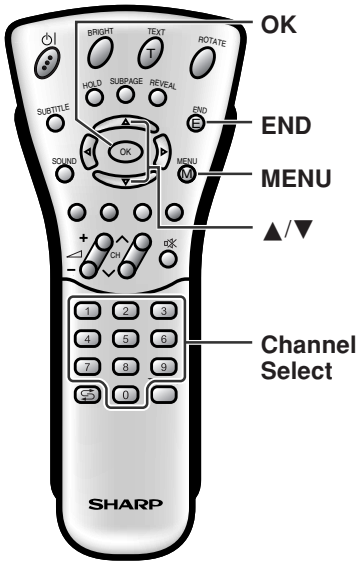
Child Lock

Important:

- Please refer to page 41 for “IMPORTANT NOTE ON DISENGAGING ADVANCED CHILD LOCK”.

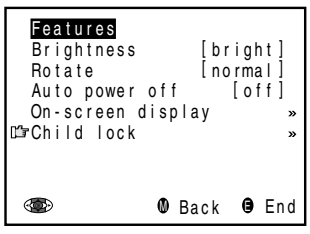
The Child Lock function blocks the viewing of any channel for which the child lock has been set.
To use the Child Lock function, you first need to define your PIN (Personal Identification Number).

[1] Defining a PIN

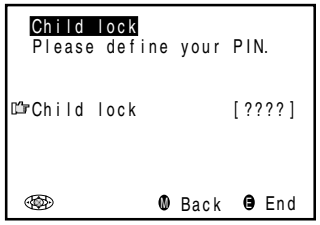


1 Perform steps **1** and **2** in **Features** to display the “Features” screen.

2 Press ▲/▼ to select “Child lock”.



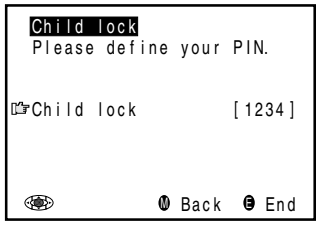
3 Press **OK** to display the PIN input screen.



4 Input the desired four-digit PIN (e.g. 1234) with **Channel Select**.

NOTE

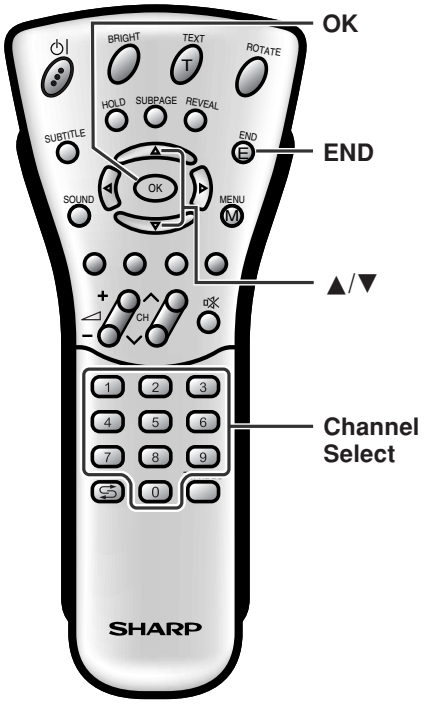
- Be sure to make a note of your PIN before pressing **OK**.
- The PIN will not be set if **MENU** or **END** is pressed before the fourth digit has been input.



5 Press **OK** to accept the entered PIN.

Child Lock (Continued)

[2] Changing/Cancelling a PIN



To change a PIN

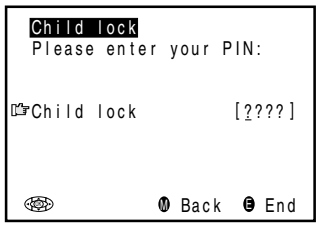
1 Perform steps **1** to **3** in **[1] Defining a PIN** to display the PIN input screen.

2 Enter your four-digit PIN (e.g. 1234) with **Channel Select**.

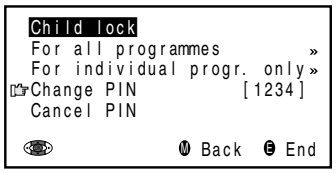
NOTE

- Numbers entered are hidden with ????.
- If the PIN has been input incorrectly, "Wrong PIN!" is displayed.

When the PIN is correctly entered, the "Child lock" screen appears.

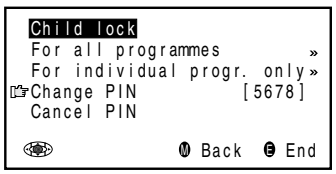


3 Press ▲/▼ to select "Change PIN", and then press **OK**. The currently defined PIN is displayed.



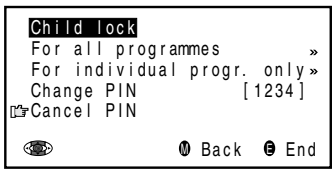
4 Input the new four-digit PIN (e.g. 5678) with **Channel Select**.

5 Press **END** to exit.



To cancel a PIN

- In step **3** above, press ▲/▼ to select "Cancel PIN", and then press **OK** to cancel the currently defined PIN.



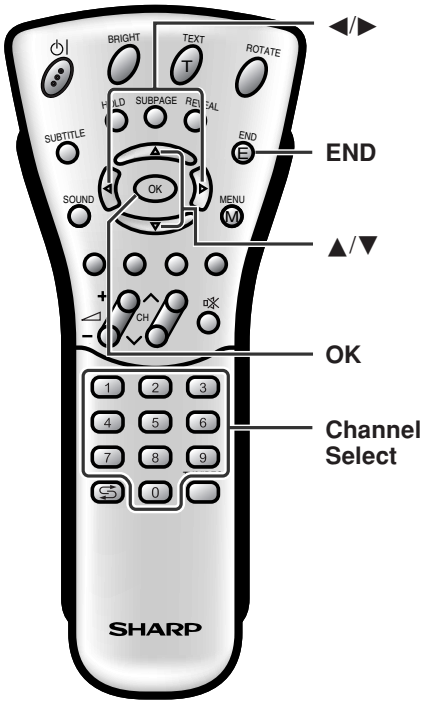
Child Lock (Continued)

[3] Setting a Child Lock

There are four different ways of activating a child lock:

1. General child lock for all programmes immediately
2. General child lock for all programmes with daily time limit
3. General child lock for all programmes with single time limit
4. Programme-position related child lock without time limit

The Child Lock comes into effect only after the LCD TV set has entered the standby mode and is then turned on again.



To set a Child Lock for all programmes with a time limit

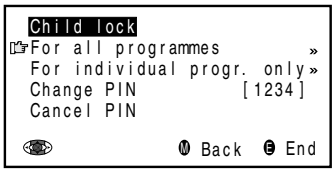
1 Perform steps **1** to **3** in **[2] Changing/Cancelling a PIN** to display the “Child lock” screen.

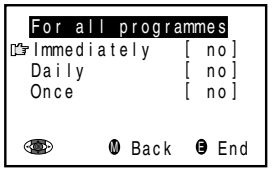
2 Press ▲/▼ to select “For all programmes”, and then press **OK** to display the “For all programmes” screen.

3 Press ▲/▼ to select the desired item. (See the table below.)

4 Press ◀/▶ to select the desired choice, and, if required, input digits with **Channel Select**.

5 Press **END** to exit.





NOTE

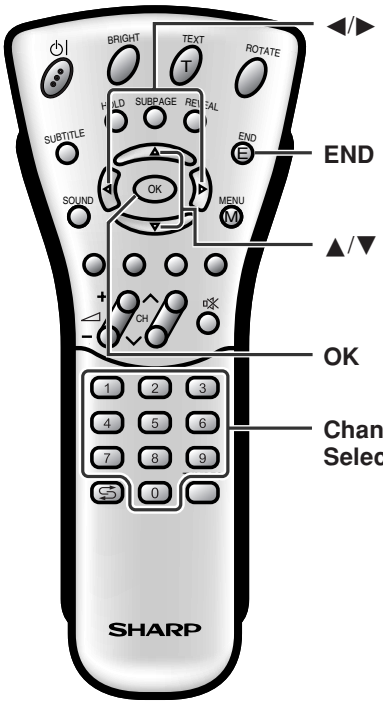
- If the current clock time is within the time limit, the Child Lock is activated immediately after the LCD TV set is turned off and on again. For example, if the current clock time is 9:00 and the time limit is specified from 22:00 to 14:00, the lock is effective from 9:00 to 14:00.
- When a Child Lock is set for all programmes with a time limit, the “Time” item is not displayed in the TV menu and cannot be selected.

Adjustment item	Choice/Input value	Description
Immediately	no ⟷ yes	Select “yes” to activate the Child Lock immediately (after the LCD TV set has been turned off and on again). The lock remains effective until “no” is selected.
Daily	no ⟷ HH:MM-HH:MM	Input the start and end time for a daily-recurring Child Lock. The lock is activated everyday unless “no” is selected.
Once	no ⟷ HH:MM-HH:MM	Input the start and end time for a once-only Child Lock. The length of the period should be up to 24 hours.

Warning:

- The timer takes its clock information from the Teletext broadcast. The teletext broadcast may be in a different time zone and therefore child lock timer may not activate as expected. Concerning this detail, please refer to page 32.

Child Lock (Continued)

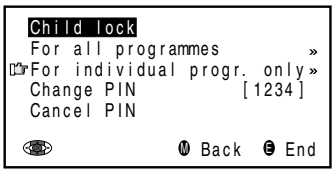


[3] Setting Child Lock (Continued)

To set a Child Lock for individual programmes without time limit

1 Perform steps **1** to **3** in **[2] Changing/Cancelling a PIN** to display the “Child lock” screen.

2 Press ▲/▼ to select “For individual progr. only”, and then press **OK** to display the “For individual progr. only” screen.

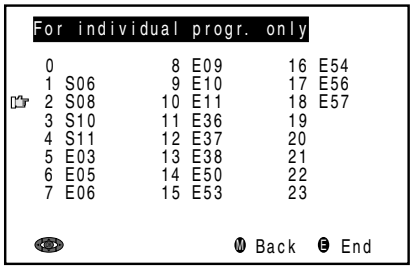


3 Press ▲/▼ and/or ◀/▶ to select the desired programme.

4 Press **OK** to lock the programme. The locked programme is displayed in red.

NOTE

- To unlock the programme, select the programme and press **OK**.
- The Child Lock remains effective until it is cancelled.



5 Press **END** to exit.

NOTE

- When a Child Lock is activated, the “Programmes” and “First installation” items are not displayed in the TV menu and cannot be selected.

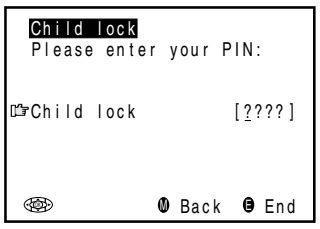
[4] Temporarily cancelling the Child Lock setting

You can view a programme for which a Child Lock has been set by temporarily cancelling the Child Lock setting. Perform the procedure below to input your PIN and cancel the Child Lock if you are prompted to do so.

- When the PIN input screen appears, input your PIN with **Channel Select**. The normal screen appears when the PIN is correctly entered.

NOTE

- If the PIN has been input incorrectly, “Wrong PIN!” is displayed.

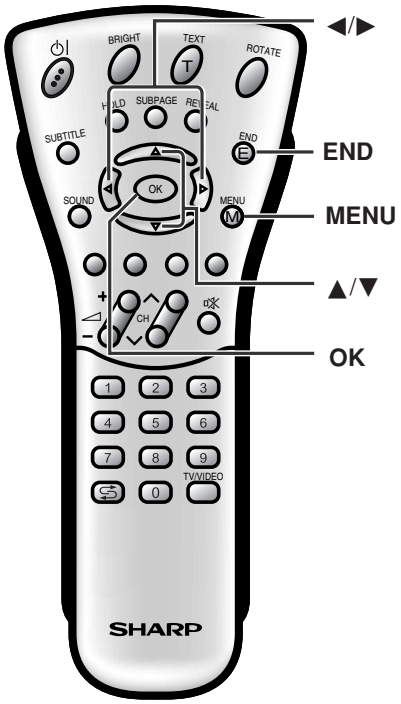


AV Connections

It is possible to manually adjust various settings for connections with external devices on the “AV connections” screen.

[1] AV1/AV2

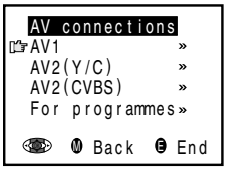
Select the appropriate signal type and colour standard for the signals from the video equipment connected to the AV1or AV2 terminal.



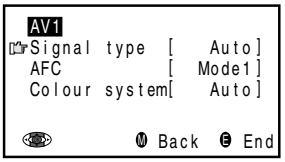
1 Press **MENU** to display the TV menu.

2 Press ▲/▼ to select “AV connections”, and then press **OK** to display the “AV connections” screen.

3 Press ▲/▼ to select “AV1”, “AV2 (Y/C)”, and “AV2(CVBS)”, and then press **OK** to display the signal type selection screen.

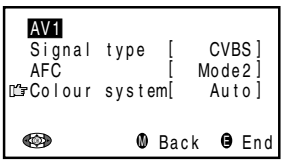


4 Press ▲/▼ to select the desired item, and then press **OK**.



5 Press ◀/▶ to select the desired “Signal type”, “AFC” and “Colour system”, and then press **OK**.

6 Press **END** to exit.



Adjustment item	Choice/Input value	Description
Signal type*	Auto, CVBS, Y/C	To select the signal type of external equipment.
AFC	Mode1, Mode2	To select frequency control modes. Mode1 is suitable for DVD players or decoders, and Mode2 is suitable for VCRs or Camcorders.
Colour system	Auto, PAL, SECAM, N358 (NTSC 3.58), N443 (NTSC 4.43), PAL60, PAL-M, PAL-N	Colour norm.

* The menu function is only visible when the AV1 is selected.

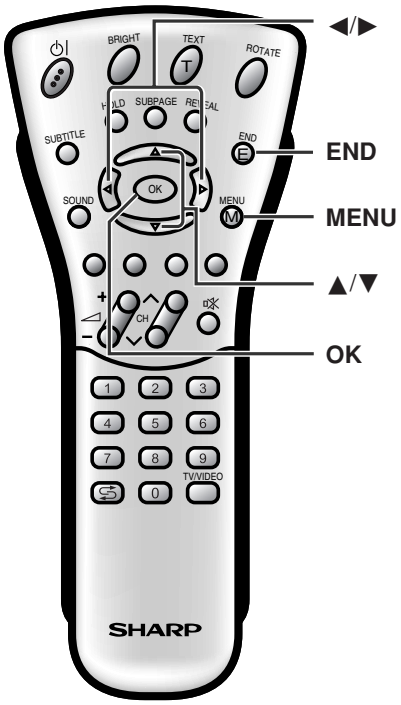
NOTE

- If no (colour) image displays, try to change the other signal type.
- Depending on the compatibility with the various types of equipment, the picture may become skewed. In this case, select the “AFC” (Automatic Frequency Control) mode that will improve the picture.
- Switching between AV input signals may be slow, depending on the settings in “Colour system”. If you want to speed up signal switching, switch “Auto” in “Colour System” to the current reception colour system.

AV Connections (Continued)

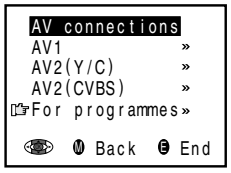
[2] For programmes

- The influence of the AV control voltage and of fast blank at programme positions from 0 to 199 can be set.
- When connecting a video device to the AV1 terminal, you need to adjust the decoder programme settings.



1 Perform steps **1** and **2** in **[1] AV1/AV2** to display the “AV connections” screen.

2 Press ▲/▼ to select “For programmes”, and then press **OK** to display the “For programmes” screen.

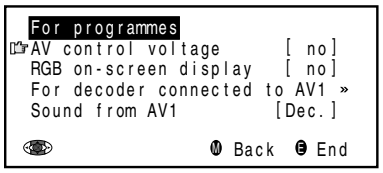


3 Press ▲/▼ to select the “AV control voltage” or “RGB on-screen display”.

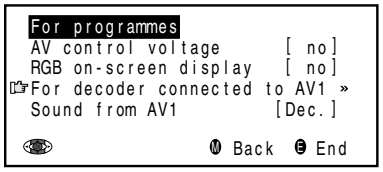
4 Press ◀/▶ to select “yes” or “no”.

NOTE

- If the item concerned is set to “yes”, the appropriate picture is through-connected at all programme positions from 0 to 199 when a control voltage/ an RGB signal is applied.

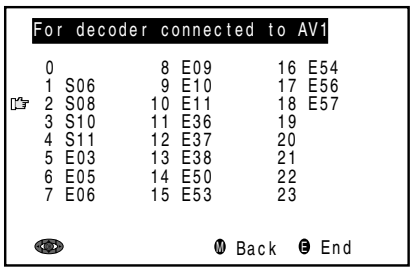


5 Press ▲/▼ to select “For decoder connected to AV1”, and then press **OK** to display the decoder programme selection screen.



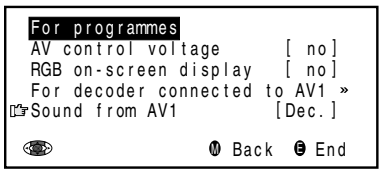
6 Press ▲/▼ and/or ◀/▶ to select the programme for the decoder, and then press **OK**. Repeat the same procedure if you want to specify other decoder programmes.

7 Press **MENU** to return to the “For programmes” screen.

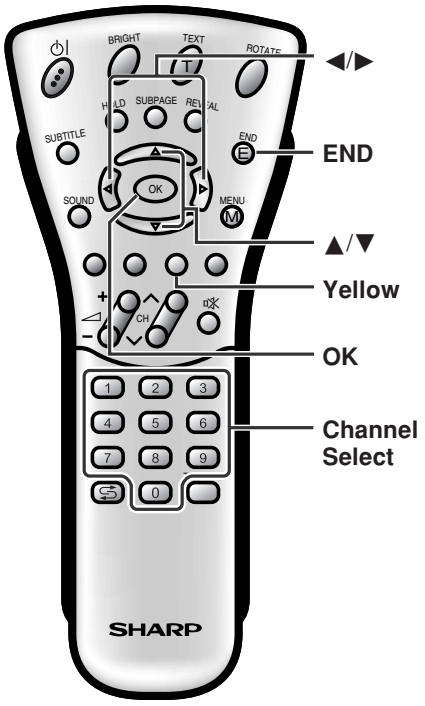


8 Press ▲/▼ to select “Sound from AV1”, and then press ◀/▶ to select the desired sound source.

9 Press **END** to exit.



Timer Functions



1 Press **Yellow** to display the “Timer functions” screen.

NOTE

- The “Timer functions” screen can also be displayed by selecting “Timer functions” in the TV menu. (See pages 13 and 14.)

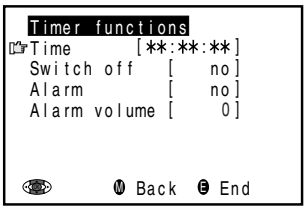
2 Press ▲/▼ to select “Time”, and then press **OK**.

3 Input the current time (HH:MM:SS) with **Channel Select**.

4 Press ▲/▼ to select the desired item. (See the table below.)

5 Press ◀/▶ to make the adjustment. If you select “– –:– –” for “Switch off” or “Alarm”, input the desired time with **Channel Select**.

6 Press **END** to exit.



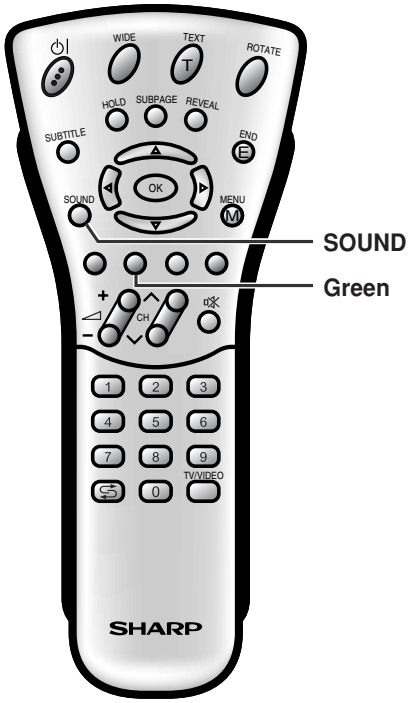
Adjustment item	Choice/Input value/Value range	Description
Time	HH:MM:SS	The time can be manually set.
Switch off	no⟷HH:MM	The LCD TV set automatically turns off at the specified time everyday.
Alarm	no⟷HH:MM	The alarm sound turns on at the specified time everyday.
Alarm volume	0 – 39	The volume of the alarm sound is selected.

NOTE

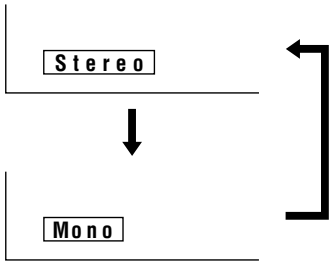
- The time is automatically set/corrected via the teletext broadcast when available.

NICAM Broadcast Selection

This enables the selection of the reception mode when receiving a NICAM-I or NICAM-B/G signal. To let you enjoy NICAM broadcasting, this LCD TV set receives NICAM stereo system, bilingual, and monaural broadcasts.

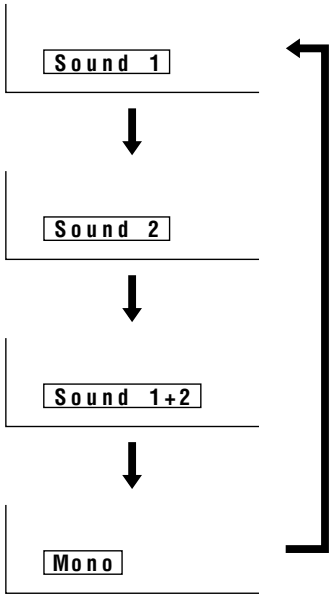


Stereo
The LCD TV set is receiving a stereo broadcast.
- Each time you press **SOUND**, the mode changes between “Stereo” and “Mono”.
- When “Mono” is selected, the TV sound is output monaurally.

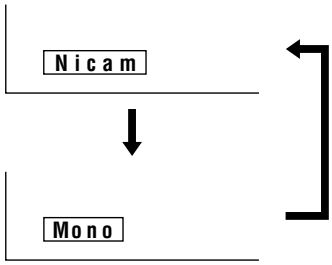


Bilingual
When the LCD TV set is receiving a bilingual programme, the “Sound 1” mode is automatically selected.
- Each time you press **SOUND**, the mode changes as follows:

Sound 1 → Sound 2 → Sound 1+2 → Mono



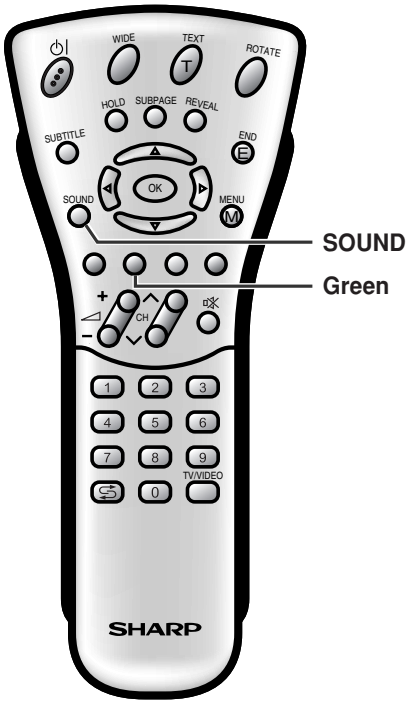
Monaural
The LCD TV set is receiving a monaural broadcast.
- Each time you press **SOUND**, the mode changes between “Nicam” and “Mono”.



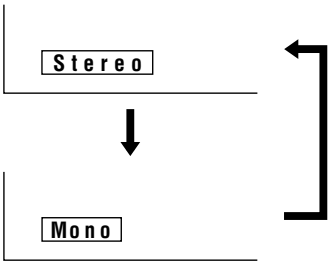
NOTE
- If approximately 3 seconds pass without a button being pressed, the mode setting is automatically terminated and the LCD TV set returns to the normal mode.
- The setting can be individually selected for each channel number.
- You can also turn off the NICAM mode by setting the “Loudsp. sound” item to “Mono” in the Sound menu screen, which is displayed when you press **Green** (see page 15).

A2 stereo Broadcasts

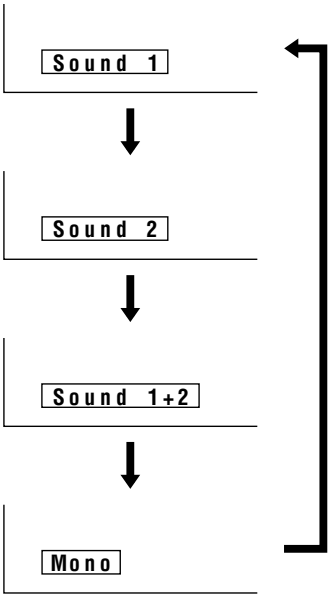
This enables the selection of the reception mode when receiving an A2 stereo-B/G signal. To let you enjoy A2 stereo broadcasting, this LCD TV set receives A2 stereo system and bilingual broadcasts.



Stereo
The LCD TV set is receiving a stereo broadcast.
- Each time you press **SOUND**, the mode changes between “Stereo” and “Mono”.
- When “Mono” is selected, the TV sound is output monaurally.



Bilingual
When the LCD TV set is receiving a bilingual programme, the “Sound 1” mode is automatically selected.
- Each time you press **SOUND**, the mode changes as follows:
  Sound 1 → **Sound 2** → **Sound 1+2** → **Mono**



NOTE
- If approximately 3 seconds pass without a button being pressed, the mode setting is automatically terminated and the LCD TV set returns to normal mode setting.
- The setting can be selected individually for each channel number.
- You can also turn off the A2 stereo mode by setting the “Loudsp. sound” item to “Mono” in the Sound screen, which is displayed when you press **Green** (see page 15).

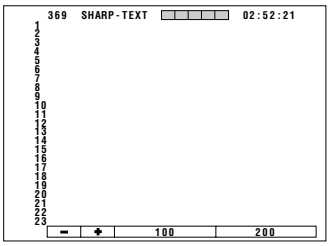
Teletext

■ What is Teletext?

Teletext is an information service organized like a magazine, which is provided by some TV stations in addition to regular television broadcasting. Your LCD TV set receives special Teletext signals broadcast by a TV station, processes the information and displays it graphically on the screen. News, weather and sports information, stock exchange prices, programme reviews and closed captioning for the deaf are among the many services available through Teletext.

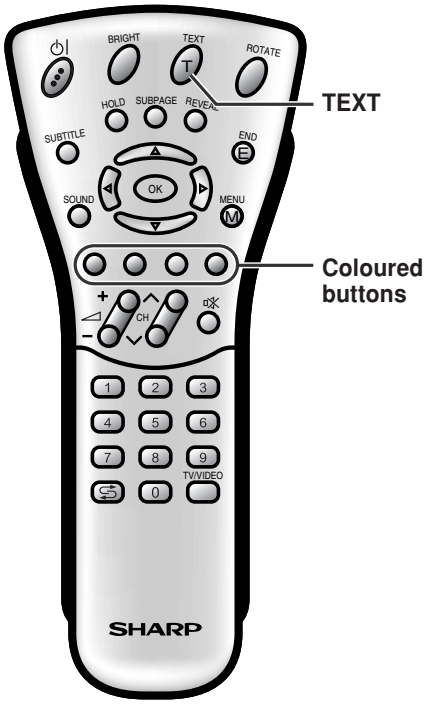
■ Teletext mode

Teletext is activated with **TEXT** on the remote control and is also closed with it. The LCD TV set can be controlled in Teletext mode directly by inputting commands with the remote control and indirectly through the on-screen display (menu system).



■ Operating instructions in Teletext mode

- The FLOF system for teletext is transmitted in UK currently.
- The TOP system for teletext is transmitted in Germany currently.
- If TOP Teletext is broadcast, a control line and TOP line can be displayed on the screen. The TOP line involves the operating instructions associated with all of the coloured buttons if TOP text is transmitted, or the operating instructions for only **Red** and **Green** if TOP text is not being transmitted.
- If there are subpages, a control line holding the operating instructions for subpages can be displayed on line 24.

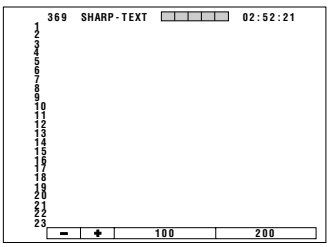


[1] Turning on and off Teletext mode

1 Select a TV channel that is broadcasting the Teletext programme.

2 Press **TEXT**. The Teletext screen appears.

● To turn off the Teletext mode, press **TEXT** again.



[2] Using the TOP line

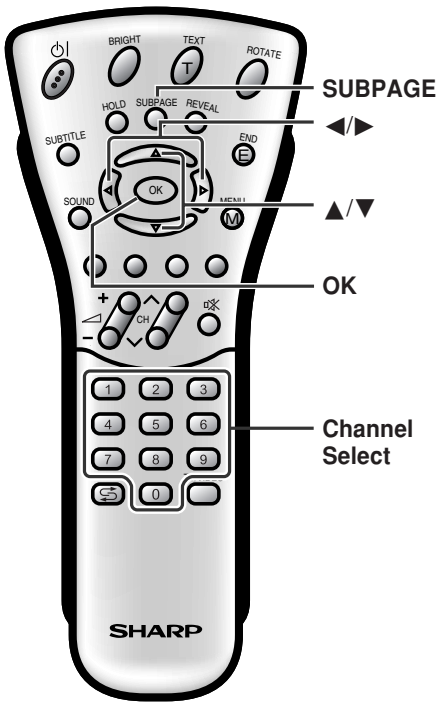
When TOP Teletext is being broadcast, you can display the TOP line, which contains the operating instructions on the screen.

1 Use the **Coloured buttons** to operate the Teletext screen.

- Press **Red** to display the previous page and **Green** to display the next page. **Yellow** and **Cyan** are as indicated on the TOP line.

NOTE

- By using the **Red** button the previously selected page will appear down to the first page which showed up directly after switching on the video text. Therefore the **Red** button has no function directly after switching on the video text.



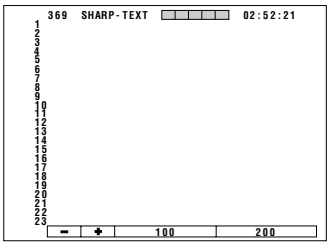
[3] Changing subpages

If a page has been selected from among several subpages, you can display a control line which contains the subpage numbers.

1 Press **SUBPAGE**. The control line with the subpage numbers is displayed on line 24, and the number of the currently selected subpage is displayed in blue.

2 Press ◀/▶ to select the desired subpage number. The selected subpage is displayed.
- You can also use **Channel Select** to select the desired subpage.

3 Press **SUBPAGE** to turn off the control line.



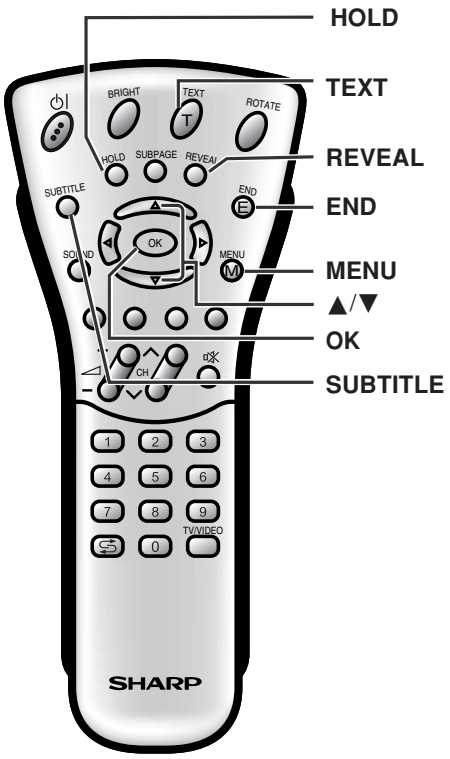
[4] Using the TOP table

When TOP Teletext is being broadcast, you can display the TOP table with the current programme data if one exists.

1 Press **OK** to display the TOP table. The Teletext page is temporarily turned off.

2 Press ▲/▼ to select the desired item. Press ◀/▶ to select topics (column 1) or subtopics (column 2) if they exist.

3 Press **OK**. A page associated with the selected item is displayed.



[5] Using Teletext menu

To select the character set

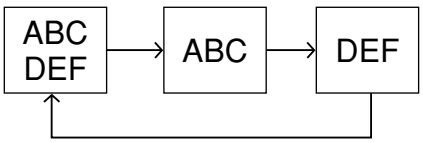
1 Press **MENU** to display the “Character set” screen.

2 Press ▲/▼ to select the desired character set.
- The colour of the letters will turn to yellow. When selecting the character set, pressing **OK** will change the letters to grey for an instant and then return them back to yellow.

3 Press **END** to exit.

[6] Useful Features for Teletext

- The **HOLD** on the remote control can be used to hold the current teletext page. Press the button again to cancel the hold mode.
- ▲/▼ can be used to zoom the current teletext page as below.



* The screen displays each mode each time ▲/▼ is pressed.

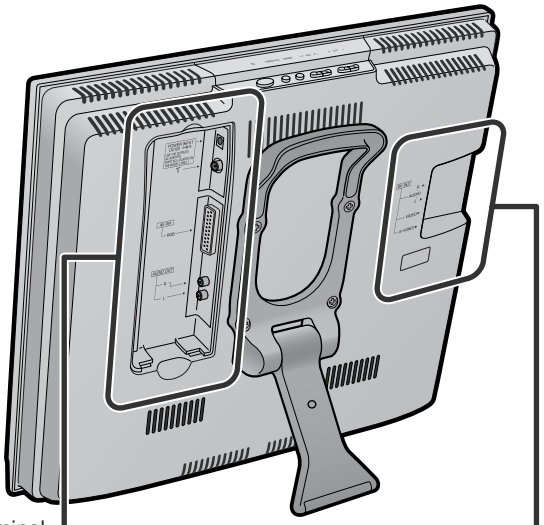
- The **SUBTITLE** can be used to quickly activate subtitles.

* Press **TEXT** to deactivate subtitles.

- The **REVEAL** can be used to display hidden information such as solutions to riddles and puzzles. Press the button again to hide the information.

Connecting External Devices

It is possible to enjoy video and sound by connecting a VCR and home video game system to the terminals located on the rear of the main unit.
When connecting an external device, turn off the power of the main unit and connecting device to prevent any possible damage.



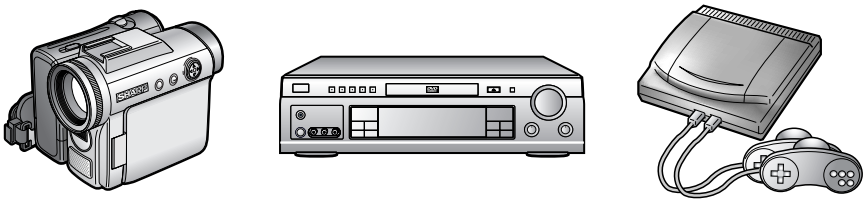
To AV-IN 1 terminal

To AV-IN 2 terminal

Examples of external devices that can be connected

- Video camera
- Home video game system
- VCR
- Laser disc player
- DVD
- Decoder

* PC connection is not possible.

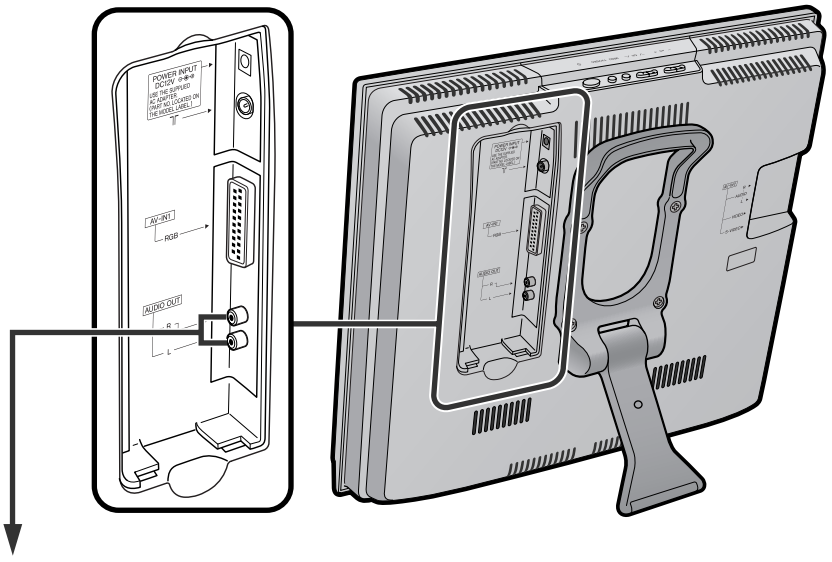


NOTE

- Use a commercially available audio/video cord for the cable.
- Only connect audio/video signals to AV-IN 1 and 2 terminals. Connecting other signals may result in a malfunction.
- The VIDEO input terminal and the S-VIDEO input terminal on the AV-IN 2 side are shared connections with priority given to the S-VIDEO terminal. If both terminals are connected, the video signals from the S-VIDEO input terminal are selected for the AV-IN 2 input. When viewing video from the VIDEO input terminal, do not connect anything to the S-VIDEO input terminal.
- For details concerning usage and connection of external devices, see the respective instruction manuals.

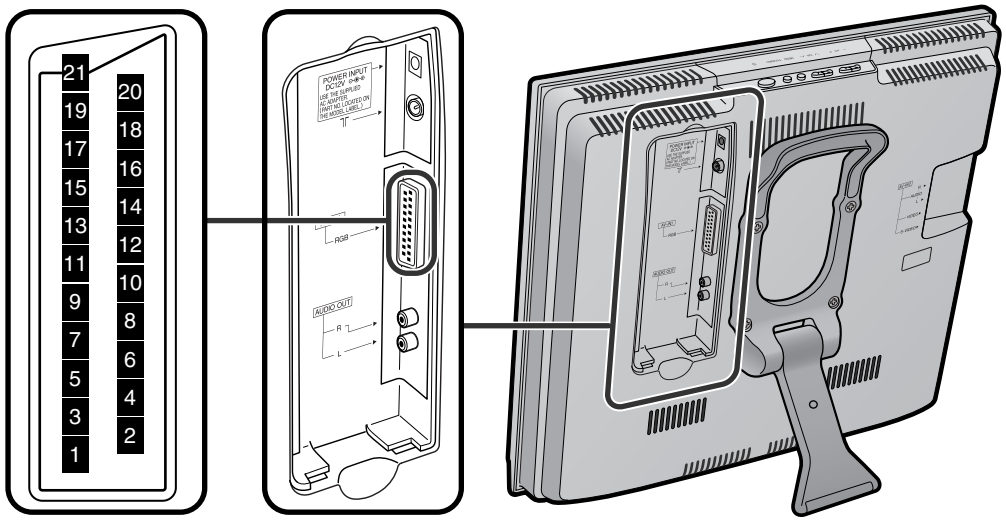
Outputting audio (AUDIO OUT)

It is possible to output audio from the LCD TV set through the AUDIO OUT terminals.



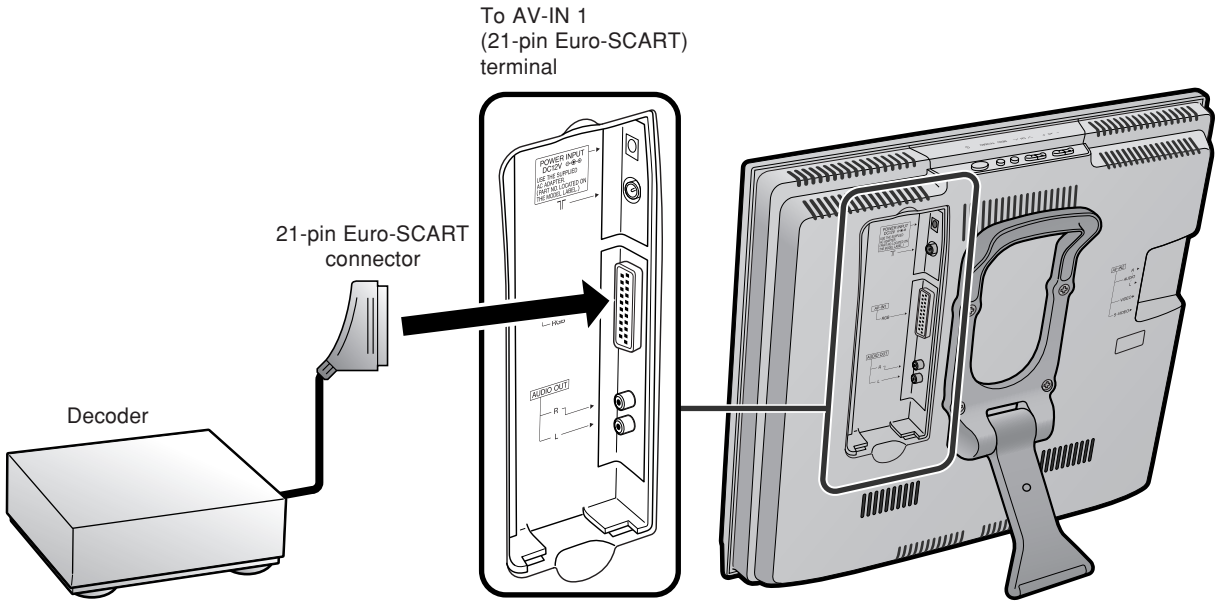
Connect an audio amplifier, etc.

Connecting a Decoder through the 21-pin Euro-SCART (AV-IN 1/RGB)

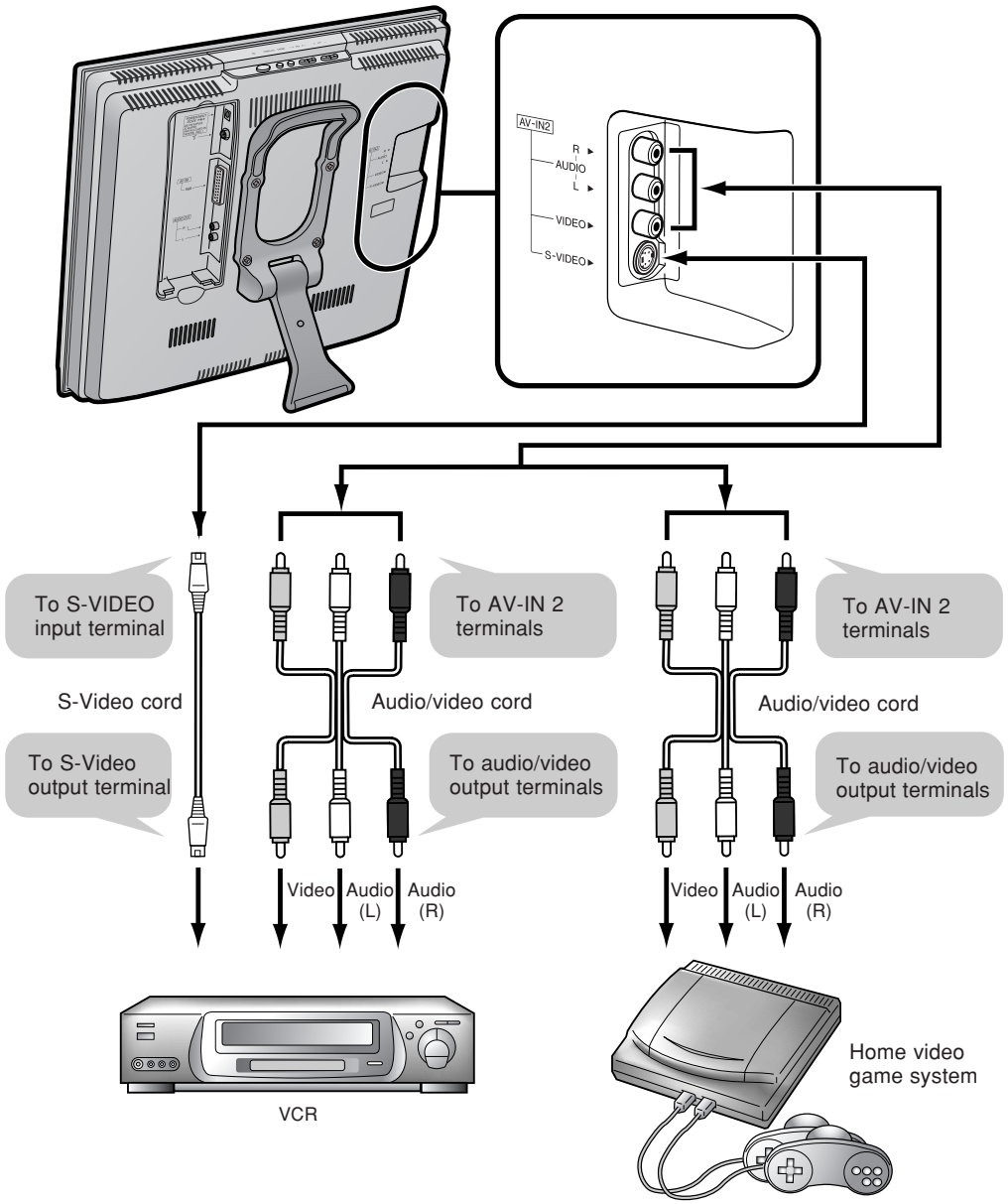


21-pin Euro-SCART (RGB)

1. Audio right output	8. Audio-video control	15. RED input
2. Audio right input	9. Earth for green	16. RED/GREEN/BLUE control
3. Audio left output	10. Not used	17. Earth for video
4. Common earth for audio	11. GREEN input	18. Earth for RED/GREEN/BLUE control
5. Earth for blue	12. Not used	19. Video output
6. Audio left input	13. Earth for red	20. Video input (PAL/SECAM/NTSC)
7. BLUE input	14. Not used	21. Plug shield



Connecting a VCR or a home video game system (AV-IN 2)

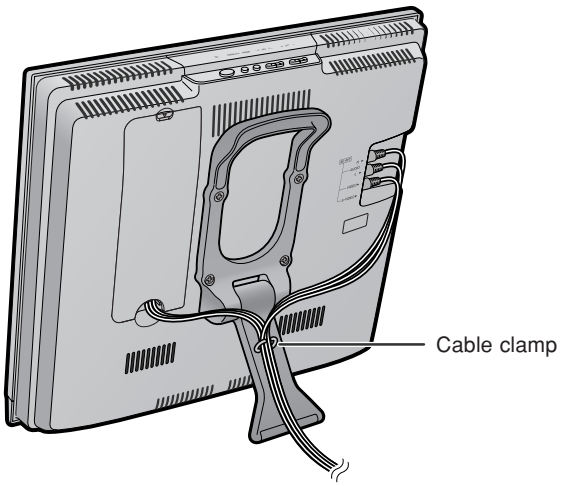


NOTE

- When connecting to both the VIDEO input and S-VIDEO input terminals for AV-IN 2, priority is given to the S-VIDEO input terminal.

How to fix the cables

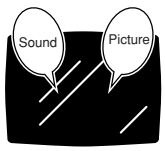
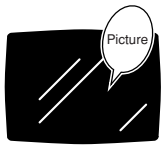
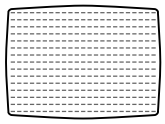
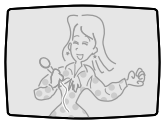
- Secure cables and cords with the supplied cable clamp so that they do not get caught when mounting the cover.



Troubleshooting

Before calling for repair services, make the following checks for possible remedies to the symptoms encountered.

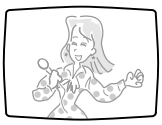
LCD TV set

Problem	Check item	Reference page
 There is no picture or sound.	• Make sure the AC adapter is properly inserted in the power outlet. • Reception other than that of broadcasting stations could be the problem. • Make sure the input mode is set to TV. • Make sure the main power switch of the main unit is on.	6 – 11 11
 There is no picture. There is no picture from AV-IN 2.	• Make sure Picture adjustment is properly adjusted. • The fluorescent lamp may have reached the end of its service life. • Make sure the S-VIDEO terminal has nothing connected.	15 – 37
There is no sound.	• Make sure the volume is not set to minimum. • Make sure the sound is not set to mute.	12 12
 There is no picture or sound, just noise.	• Make sure the antenna cable is properly connected. • Bad reception could be the problem.	6 –
Picture is not clear.	• Make sure the antenna cable is properly connected. • Bad reception could be the problem.	6 –
Picture is too light or improperly tinted.	• Check the colour adjustment.	15
 The picture is too dark.	• Check if “Brightness” is set to “dark”. • Check “Contrast” and “Black level”. • The fluorescent lamp may have reached the end of its service life.	21,22 15 –
Remote control does not work.	• Check if batteries in the remote control have sufficient power. • Make sure the remote sensor window is not under strong lighting.	5 5

■ Cautions regarding use in high and low temperature environments

- When the unit is used in a low temperature space (e.g. room, office), the picture may leave trails or appear slightly delayed. This is not a malfunction, and the unit will recover when the temperature returns to normal.
- Do not leave the unit in a hot or cold location. Also, do not leave the unit in a location exposed to direct sunlight or near a heater, as this may cause the cabinet to deform and the LCD panel to malfunction.
  (Storage temperature: –20°C to +60°C (–4°F to +140°F))

Antenna

Problem	Check item
 The picture is not sharp. The picture shakes.	• The reception may be weak. • The quality of the broadcast may also be bad. • Make sure the antenna is facing the correct direction. • Make sure the outside antenna has not been disconnected.
The picture has ghosts.	• Make sure the antenna is facing the correct direction. • Broadcast waves may be reflected from adjacent mountains or buildings.
The picture is spotted.	• There may be interference from automobiles, trains, high-voltage lines, neon lights, etc. • There may be interference between the antenna cable and power cable. Try positioning them further apart.
There are stripes on the screen or colours fade.	• Is the unit receiving interference from other devices? Transmission antennas of radio broadcasting stations and transmission antennas of amateur radios and cellular phones may also cause interference. • Use the unit as far apart as possible from devices that may cause possible interference.

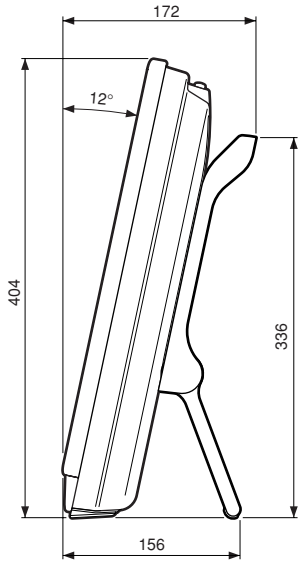
Specifications

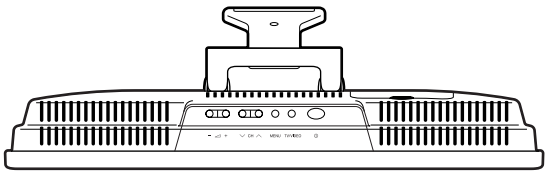
Item		20" LCD COLOUR TV, Model: LC-20S1E
LCD panel		20" Advanced Super View & BLACK TFT LCD
Number of dots		921,600 dots
Video colour system		PAL/SECAM/NTSC
TV	TV-Standard (CCIR)	B/G, I, D/K, L
	TV-Tuning System	Auto preset 200 ch.
	STEREO/BILINGUAL	NICAM, A2 stereo
	AUTO PRESET	YES
	CATV	~Hyper Band
Brightness		430 cd/m^2
Lamp life		60,000 hours
Viewing angles		H: 170° V: 170°
Audio amplifier		2.1 W × 2
Speakers		4 cm × 7 cm 2 pcs.
Terminals	AV-IN 1	21 pin Euro-SCART
	AV-IN 2	S-VIDEO, VIDEO, AUDIO
	OUT	AUDIO
	Antenna	DIN
	Headphones	3.5 mm ø jack (Front)
OSD language		English/German/French/Spanish/Italian/Swedish/Dutch/Russian
Power requirement		DC 12 V, AC 110 V – 240 V, 50/60 Hz
Weight		6.4 kg w/o accessories
Accessories		Operation Manual, Remote Control, Batteries (× 2), AC adapter, AC cord, Cable clamp

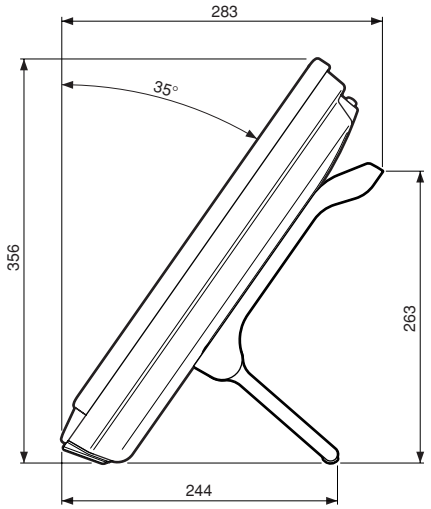
■ As a part of policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice. The performance specification figures indicated are nominal values of production units. There may be some deviations from these values in individual units.

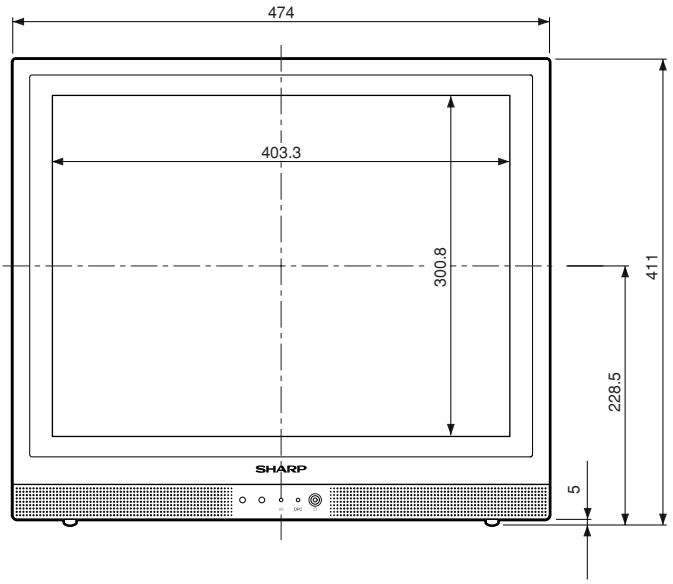
Dimensional Drawings

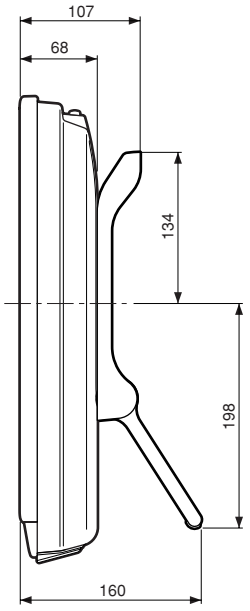
Unit: mm

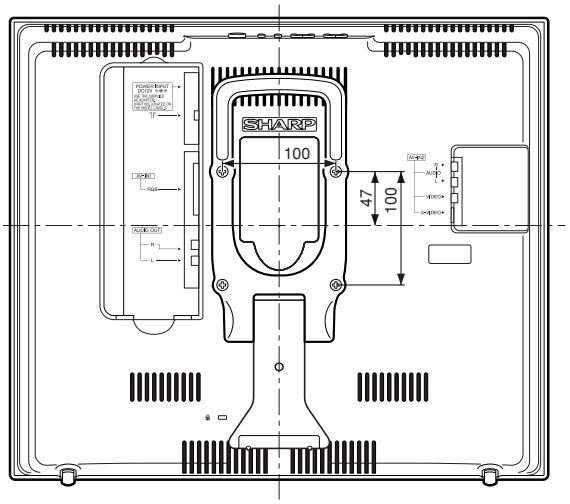












IMPORTANT NOTE ON DISENGAGING ADVANCED CHILD LOCK

We suggest removing the following instruction respectively with page GB 41 and GB 43. As this Operation Manual is multilingual, we also suggest the same with each language.
If you have forgotten your personal code number and cannot disengage ADVANCED CHILD LOCK, follow the procedure below.
1. Press **MENU** to display the TV menu.
2. Press ▲/▼ to select “Features”, and then press **OK** to display the “Features” screen.
3. Press ▲/▼ to select “Child lock,” then press **OK**.
4. The PIN input menu appears.
5. Input “3001” with **Channel Select**.
The Child lock setting menu appears and the PIN is cleared.
A new PIN can now be input.

ADVANCED CHILD LOCK will now be disengaged.
We suggest that you remove this instruction from the manual to prevent children from reading it. Keep it in a safe space for future reference.

WICHTIGER HINWEIS ZUR AUFHEBUNG DER KINDERSICHERUNG

Wir schlagen vor, die folgenden Instruktionen von Seite GB 41 bzw. GB 43 in Englisch zu entfernen. Da diese Bedienungsanleitung mehrsprachig abgefasst ist, empfehlen wir den gleichen Vorgang auch für jede andere Sprache.
Wenn Sie Ihre persönliche Codenummer vergessen haben und die Kindersicherung nicht aufheben können, so gehen Sie wie folgt vor.
1. Drücken Sie **MENU**, um das TV Menü anzuzeigen.
2. Drücken Sie ▲/▼, um “Funktionen” zu wählen, und drücken Sie dann **OK**, um das Menü “Funktionen” anzuzeigen.
3. Drücken Sie ▲/▼, um “Kindersicherung” zu wählen, und drücken Sie dann **OK**.
4. Das Menü für PIN-Eingabe erscheint.
5. Geben Sie “3001” mit den **Kanalwahl** ein.
Der Bildschirm “Kindersicherung” erscheint und die PIN wird gelöscht.
Nun kann eine neue PIN eingegeben werden.

Die Kindersicherung wird nun aufgehoben.
Wir empfehlen, dass Sie diese Anleitung aus dem Handbuch entfernen, damit Ihre Kinder sie nicht lesen können. Bewahren Sie sie für spätere Bezugnahme an einem sicheren Platz auf.

REMARQUE IMPORTANTE CONCERNANT LE DÉBLOCAGE DU VERROUILLAGE PARENTAL AVANCÉ

Nous suggérons de retirer les instructions suivantes des pages GB 41 et GB 43 en anglais. Le mode d’emploi étant multilingues, il est suggéré aussi de le faire pour les autres langues.
Si l’on a oublié son numéro de code personnel et que VERROUILLAGE PARENTAL AVANCÉ ne peut pas être débloqué, suivre la procédure ci-dessous.
1. Appuyer sur **MENU** pour faire apparaître le menu de télévision.
2. Appuyer sur ▲/▼ pour choisir “Caractérisiques” et appuyer sur **OK** pour afficher la page-écran “Caractéristiques”.
3. Appuyer sur ▲/▼ pour choisir “Sécurité enfants” et appuyer sur **OK**.
4. Ceci fait apparaître le menu de saisie du numéro PIN.
5. Saisir le numéro “3001” avec **Sélection de Chaîne**.
Le menu de paramétrage de sécurité enfants apparaît et le numéro PIN est effacé.
Un nouveau mot de passe peut alors être introduit.

VERROUILLAGE PARENTAL AVANCÉ est alors débloqué.
Nous suggérons de retirer cette instruction du mode d’emploi afin d’éviter que des enfants la lisent. La conserver en lieu sûr pour référence future.

NOTA IMPORTANTE SULLA DISATTIVAZIONE DEL BLOCCO AVANZATO PER I BAMBINI
Si suggerisce di rimuovere la seguente istruzione rispettivamente con la pagina GB 41 e GB 43 in inglese. Poiché questo Manuale di istruzioni è in versione multilingue, si suggerisce anche di fare la stessa cosa per ogni lingua.
Se si è dimenticato il proprio numero di codice personale e non è possibile disattivare il BLOCCO AVANZATO PER I BAMBINI, seguire il procedimento sotto.
1. Premete **MENU** per visualizzare il menu TV.
2. Premete ▲/▼ per selezione “Funzioni” e quindi premete **OK** per visualizzare il corrispondene schermo “Funzioni.”
3. Premete ▲/▼ sino a selezionare “Sicura per bambini” e quindi premete **OK**.
4. Appare lo schermo relativo all’inserimento del PIN.
5. Con i tasti di **Selezione del Canale** inserite “3001.”
Appare lo schermo relativo all’impostazione del blocco bambini, mentre il PIN viene cancellato.
Ora può essere immessa una password nuova.

Il BLOCCO AVANZATO PER I BAMBINI ora viene disattivato.
Si suggerisce di togliere questa istruzione dal manuale per evitare che i bambini la leggano. Conservarla in un posto sicuro per riferimenti in futuro.

AVISO IMPORTANTE SOBRE LA DESACTIVACIÓN DE LA PROTECCIÓN PARA NIÑOS AVANZADA

Se sugiere retirar las siguientes instrucciones respectivamente con las páginas GB 41 y GB 43 en inglés. Como este manual de manejo es multilingüe, también sugerimos lo mismo para cada idioma.
Si ha olvidado su número de código personal (PIN) y no puede desactivar la PROTECCIÓN PARA NIÑOS AVANZADA, siga el procedimiento siguiente.
1. Presione **MENU** para visualizar el menú de TV.
2. Presione ▲/▼ para selecconar “Varios” y luego presione **OK** para visualizar la pantalla de “Varios”.
3. Presione ▲/▼ para seleccionar “Restricción niños”, luego presione **OK**.
4. Aparecerá el menú de ingreso del PIN.
5. Ingrese “3001” con **Selección de Canales**.
Aparecerá el menú de ajuste de protección para niños y el PIN será borrado.
Ahora se podrá introducir un número secreto nuevo.

Ahora LA PROTECCIÓN PARA NIÑOS AVANZADA se habrá desactivado.
Le sugerimos que retire esta instrucción del manual para evitar que los niños la lean. Guárdela en un lugar seguro para referencia futura.

VIKTIG ANMÄRKNING OM AVSTÄNGNING AV BARNLÅSET

Vi rekommenderar att följande anvisning samt sidan GB 41 och GB 43 på engelska avlägsnas. Då denna bruksanvisning är flerspråkig bör samma sak göras även för övriga språk.
Om du har glömt bort ditt lösenord så att du inte kan stänga av det AVANCERADE BARNLÅSET så gör på följande sätt.
1. Tryck på **MENU** för att visa TV-menyn.
2. Tryck på ▲/▼ för att välja “Egenskaper”, och tryck sedan på **OK** för att visa skärmen “Egenskaper.”
3. Tryck på ▲/▼ för att välja “Barnsäkring.” och tryck sedan på **OK**.
4. Inmatningsskärmen för PIN visas.
5. Mata in “3001” med **Kanalväljarna**.
Inställningsmenyn för barnlåset visas och ditt tidigare PIN raderas.
Det går nu att mata in ett nytt PIN.

Därmed stängs det AVANCERADE BARNLÅSET av.
Vi rekommenderar att du tar bort denna anmärkning ur bruksanvisningen för att förhindra att barn får syn på den. Förvara anmärkningen på något säkert ställe för framtida bruk.

BELANGRIJKE OPMERKING OVER HET ANNULEREN VAN DE GEAVANCEERDE KINDERVERGRENDELING

Wij suggereren het verwijderen van de volgende aanwijzing op respectievelijk blazijde GB 41 en GB 43 in het Engels. Daar deze gebruiksaanwijzing meertaligis, wordt hetzelfde gesuggereerd voor de andere talen.
Wanneer u de kindervergrendeling niet kunt annuleren omdat u de pincode vergeten bent, dient u als volgt te werk te gaan.
1. Druk op **MENU** om het TV menu te openen.
2. Druk op ▲/▼, seleteer “Eigenschappen” en druk vervolgens op **OK** om het “Eigenschappen” scherm te openen.
3. Druk op ▲/▼, selecteer “Kinderslot” en druk vervolgens op **OK**.
4. Het PIN invoerscherm verschijnt.
5. Voer “3001” in met de **Kanaalkeuzetoetsen**.
Het “Kinderslot” scherm zal nu verschijnen en uw oude PIN code zal zijn gewist.
U kunt nu een nieuwe PIN code invoeren.

De kindervergrendeling is nu geannuleerd.
Het is raadzaam dat u deze instructie uit de gebruiksaanwijzing verwijdert om te voorkomen dat deze door kinderen wordt gelezen.
Bewaar deze instructie op een veilige plaats voor latere verwijzing.

SHARP®

SHARP CORPORATION

Printed on environmentally friendly paper
Auf ökologischem Papier gedruckt
Imprímé sur papíer écologique
Stampato su carta ecologica
Impreso en papel ecológico
Tryckt på miljövänligt papper
Afgedrukt op ecologisch papier

Printed in Spain
Gedruckt in Spanien
Imprimé en Espagne
Stampato in Spagna
Impreso en España
Tryckt i Spanien
Gedrukt in Spanje
TINS-A837WJZZ
09-2003